

Med. 1800

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T R E A T I S E
O F
D I S E A S E S
I N G E N E R A L.

W H E R E I N

The True CAUSES, NATURES, and ESSENCES
of all the PRINCIPAL DISEASES incident to the
HUMAN BODY, are mechanically accounted for
and explain'd, and their respective Intentions of
CURE assign'd upon the same Principles.

To which is subjoined,

A System of PRACTICE, applied to each DISEASE,
and constituted upon the same most legitimate and solid
Principles of Mechanical Reasoning.

The PRESCRIPTIONS *in* ENGLISH.

All render'd familiar to every Capacity; and digested (for
Method's sake) into SEVEN BOOKS.

W I T H A N

A P P E N D I X,

C O N T A I N I N G.

A Philosophical ESSAY on the Nature, Properties, Action,
Use and Abuse of QUICK-SILVER.

Comprehending likewise

A cursory View of the wonderful Virtues and Properties of
ANTIMONY and STEEL.

In TWO VOLUMES.

By CHARLES PERRY, M.D.

V O L. I.

L O N D O N :

Printed for T. WOODWARD, at the *Half-Moon*, near *Temple-
Bar*; and C. DAVIS, in *Pater-noster Row*,
Printers to the ROYAL SOCIETY.

M.DCC.XLI.

G69/1310

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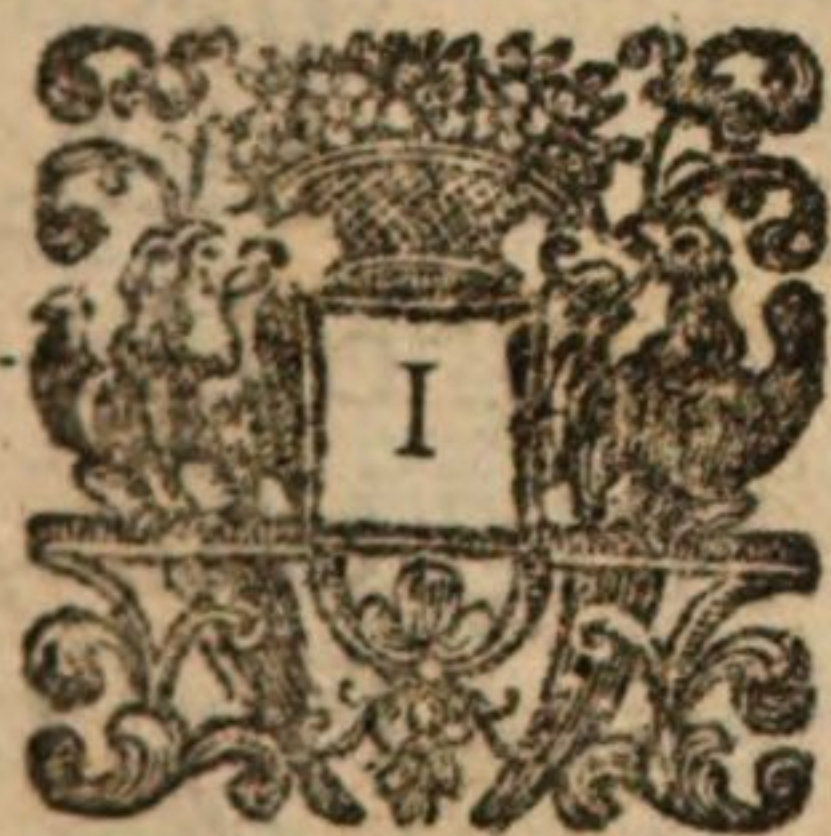


To the HONOURABLE

Sir Hans Sloane, Bart.

PRESIDENT of the *College of Physicians*, and of the *Royal Society of London*.

S I R,



T has long been, and is at this Day, (notwithstanding the great Improvements and Embellishments, which the last half Century has added, both in the Theory and Practice) a general Complaint, That the State of Physic lies yet in comparative Darkness and Uncertainty; and that it has not effectually rescued itself from the Yoke and Tyranny of *Empiricism*.

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That this deplorable Misfortune and Complaint (as it may regard some foreign States) is founded in Truth, I can infer and conclude from the Observations I have made on their Practice and Writings. But how far it may be equitable and just, as applied to the Faculty at Home, that I must refer to your Decision; as you are daily conversant in it, are thoroughly acquainted with it in its full Extent, and are a most perfect Judge of it.

However, I can presume to make a modest Conjecture, upon the Authority of common Report, attested, or at least corroborated, by several Treatises, which are immutably my Favourites; and which, I think, plainly specify how far the *British* Nation is superior to her Neighbours, in her Advances towards rendering Physic truly a Science.

But nevertheless, when I infer, from indisputable Reports, how many Gentlemen there are of the Faculty in *Britain*, who are justly celebrated and conspicuous for their Learning, and other masterly Talents (as well natural, as acquired);

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quired); and likewise, that there are, and have been, for some Years past, extant with us, such Exemplars and Monitors as the Works of a *Mead*, a *Freind*, *Morgan*, *Cheyne*, *Wainwright*, and *Arbuthnot*; to which I must add those of *Pitcairn*, and *Keill's Tentamina Medico-Physica*: I say, when I seriously reflect on these Things, I am astonish'd, that so necessary and important a Design is not yet further advanc'd; and that a general System, or *Codex*, has not been compiled, accounting for, and explaining the whole Catalogue of Diseases, with all their most common and notable *Phænomena*, in a rational or philosophical Light; for it is by that means, and that only, that People can be led and instructed to have a just and adequate Notion of Things.

The Invalidity of Theories, as they now stand, and the Insufficiency of the most diligent and accurate Observation added to them, appear daily in numerous Instances: And if the current Theories of Physic were to be as arbitrary and despotic as the common Law, without Doubt they would, in many Cases, be

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just as iniquitous and pernicious; that is, those would be as destructive to Peoples Lives and Healths, as this (if uncontroul'd) would be to their Properties. And hence I infer, that 'tis just as requisite a Court of Reason should be instituted, to curb and meliorate the establish'd Theories of Physic, as it is for the Court of Equity, to check and controul the common Law.

The Parallel I have here drawn, betwixt the present State of Physic (or rather its *Leges scriptæ*) and the common Law, will (if maturely weighed and considered) appear to be perfectly just; for it is no more possible, that any Theory or Theories of Physic should take in and provide for all the *Phænomena* that do, or for the future may present in the various Diseases, and the divers Subjects, in which they are or may be reposed, than it is for any System of Law (whether founded on Statutes or Precedents) to provide for all the various Circumstances that may present in that Sphere: So that it is absolutely necessary there should be an Appeal to Reason in one Sphere, as well as the other.

other. But, though the Law determines that Authority in a single Person, yet Physic requires it to be lodg'd in every individual Member of the Faculty. Now, in order to further, promote, and even precipitate, this necessary and defireable End, it is much to be wished, that all Professors, and other Teachers in the Faculty, and especially all such as shall futurely write and publish for the Benefit and Improvement of the Science, would discuss Things rather in a rational and philosophical, than either in an historical or a mathematical Light.

But nevertheless, a general (though it be superficial) Taste of mathematical Learning is certainly very necessary, as it opens, shapes, cultivates and improves a Man's rational Faculties. And indeed, there is scarce a Proposition in *Euclid* more demonstrable, than that every Man (*cæteris paribus*) will reason better, and more authentically, with, than without a Taste of Mathematics; for mathematical Knowledge is no less necessary, as an Accessory, to sound mechanical Reasoning, than it is to obviate and demonstrate

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the Truth and Validity of such Reasoning.

The ensuing Work (though given rather as a Sample or Model, than as a finish'd Piece) will, I flatter myself, be of great Use and Benefit, considering the Narrowness of its Limits: For I have endeavour'd, through the Whole, to come up as near as possible to the Title; that is, I have brought not only every momentous Disease, but likewise every momentous Symptom of the Diseases treated on, to the Test of a mechanical Explanation. Besides which, I have stated their respective Intentions of Cure, and instituted a System of Practice for each, upon the same Plan; and afterwards (in several particular Diseases, at least) I have referred the Medicines prescribed to the Intentions laid down: Whence it plainly appears, how justly and exactly they quadrate one with the other. But what Merit soever the Work may have in itself, the Honour of your Adoption will, in the public Estimation, stamp an additional Value upon it. And if your Endeavours to promote and promulge it should render

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der it as extensive as your own Renown, and great Character, it will then be without Bounds or Limits: Which Consideration alone sufficiently testifies for the Justness of my Appeal.

It will doubtless appear to the Public, (as 'tis true in Fact) that I don't address myself to you in the Style of ordinary Dedications, nor indeed in the Style of any Dedication whatever; for I am plainly expostulating with you, and appealing to you, concerning the present State of such Things as are of the greatest Importance to human Life and Welfare, and which want much to be mended and improved. But, what Injustice soever I may have done you, by being perfectly tacit as to your high Merit, and eminent Qualifications, I am sure I have done all imaginable Justice to my Performance, by procuring it the Adoption of a Person, who is not only Head of the most illustrious Faculty of Physic in the World, but is likewise universally known and acknowledg'd for his superior Talents, Erudition, and Candour: And, perhaps, I may obtain more Credit in
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the public Estimation, by this Appeal, than by the Work itself; for all the World will acknowledge my good Judgment and Choice in the former, how little soever they may like or digest the latter.

But be its Fate as it will, in that Particular, I shall rest perfectly easy and contented, under the comfortable Retrospect of a sincere Intention to contribute to the Good of a Science, in which the Good of all human Kind is intimately concern'd and interested.

I most sincerely wish you the Enjoyment of perfect Health (a Blessing you so eminently procure to others); and that you may long live, for the Benefit of that Science which you so truly adorn: And I hope you will pardon the Liberty I take, in subscribing myself, with the most profound Veneration and Respect,

S I R,

Your most Devoted,

and most Obedient,

Humble Servant,

Charles Perry.

LEGHORN,
MDCCXXXV.



THE PREFACE.



MENS sana in corpore sano is (as an ingenious Author * observes) the Sum and Measure of human Felicity: And therefore he who shall advance the best and most effectual Precepts, to restore Mankind to, or preserve it in, such a State, is undoubtedly the best Benefactor to his Fellow-creatures, with regard to their temporal State.

This Observation (indeed) would be very just and true, if, by mens sana, our Author means, not only a Mind sui juris, whose Actions and Operations are neither eclipsed nor depraved, but such as is likewise free from all inordinate Passions and Affections: For it is evident, as well from common Reason and Experience, as from divine Tradition, that these Things are great Bars to human Felicity. The Assertion, however, is comparatively true: And a Man who is conscious to himself of a Capacity to serve Mankind, in so great and important a Point, would be inexcusable, as well to the Creator

* Preface to Dr. Morgan's *Philosophical Principles of Medicine*.

as the Creature, if he should neglect the least Opportunity of doing it.

The Author above-quoted has certainly exerted his best Endeavours, and consequently has discharged his Duty to the Public, how much soever he may have fallen short of his Aim and Design.

Indeed the Piece which the said Author has given us, is truly learned and ingenious; but I very much fear it contains more Art, Learning, and Invention, than real Usefulness. It must be allowed, however, that he is almost the first Person who has attempted to rescue Physic from the Chaos of Empiricism; to bring it to the Test of mechanical Reasoning, and to explain all the various Phænomena of Diseases, and the Operations of Medicines, in the same Light: And therefore, though the Essay, or Treatise in Question, is only general and superficial, yet a great deal of Praise ought to be ascribed to the happy Thought, as well as to the Learning, Beauty, and Ingenuity, which are displayed in the Performance.

Moreover, the Treatise in Question is not only a good Rudiment, but an excellent Monitor, worthy to instruct, prompt, and inspire, the present, and all future Ages, to prefer and pursue the same excellent and useful Design.

*Be it allowed me to observe, however, that though I have made a Reflection on the said Performance, (which I am sure is very just) yet there is nobody, not the most sanguine of Dr. Morgan's Friends, that can be more enamour'd with his Performance than I am; nor that can more honour, admire, and esteem the Author, on account of it, than I do: And (to do him yet further Justice) it was reading
his*

his Performance that first inspired me with the Design of this Undertaking; and I heartily wish, that other Persons, of superior Capacity, may follow my Example.

It may (perhaps) be thought a great Presumption, (by many Gentlemen of Learning, Repute, and Character, in the Faculty, who never took the Pains to consider Things in the Light of mechanical Philosophy) that I should attempt, in any wise, to depreciate an accurate and complete Knowledge and Acquaintance with what we properly call the Leges scriptæ Medicinæ: But nevertheless, I flatter myself, I shall be able to clear that Point up; and to make appear, (next to a Demonstration) that the most perfect and consummate Knowledge of the Leges scriptæ Medicinæ, are not the only Requisites to form a good Physician.

What we properly call the Leges scriptæ Medicinæ, or the written Laws of Physic, comprehend, First, The Knowledge of Anatomy, or the Structure of the human Body, and its Oeconomy. Secondly, The Theory or History of Diseases, with all their various Phænomena (such as their various Symptoms, Diagnostics, Prognostics, and the various Methods of treating them). And, Thirdly, The Materia Medica.

The Materia Medica comprehends all such Things as are used medicinally, whether they be Simples (as Herbs, Roots, Fruits, Animals, Minerals, Fossils, &c.) or Compounds (as are all those of the Galenical and Chymical Tribes); with their respective Virtues and Uses. But the Knowledge of these Things (which, indeed, are indispensably necessary for a Physician, and may be acquired by almost any one,

one, who will be at the Pains to read and remember) will appear an insufficient Qualification, for the following Reasons; viz.

It is confess'd, that where such and such Symptoms concur, or the major Part of them, the Disease manifestly claims such a Denomination. This, indeed, we are sufficiently instructed of, in the various Histories of Physic extant with us. We have likewise the Causes assign'd, in some of those Histories, and long, promiscuous, indigested Catalogues of Medicines, directed for the Cure; as, for Example, in Riverius, and others: Though, in my humble Opinion, the Causes assign'd, and the Medicines proposed for the Cure, are very precarious and unsatisfactory. But to suppose the contrary, viz. That the Causes assign'd were perfectly right and well-judg'd, and that the Medicines directed for the Cure were well concerted; some Things, very material and momentous, yet remain.

Scarce any body has yet attempted, (Dr. Morgan excepted) or, at least, made any considerable Advances in, explaining the true, genuine Natures and Essences of Diseases; and fewer yet (if possible) have been at the Pains maturely to weigh, digest, and determine on the Intentions of Cure, upon scientific or mechanical Principles: And I will venture to affirm, that all Conjectures and Conclusions of that Nature will be very weak and uncertain, without the Assistance of mechanical or philosophical Reasoning.

Amongst the many Physicians whom I have, from time to time, consulted and conversed with, I have met with but very few who have manifested a Talent or a Turn to mechanical Reasoning, about such Things

Things as are the proper Objects of a Physician's Consideration; but, on the contrary, I have found, that they generally pique themselves upon a thorough Knowledge and Acquaintance with the Theory of Medicine, and won't swerve a Hair's Breadth from the Letter of it.

In sad Truth, I have known many Instances of this Sort, viz. where Physicians have been so over-tenacious of the prescribed Forms, or written Laws of Physic, that they have most obstinately pursued and persisted in them, in Contempt of, and Contradiction to, the most plain and obvious Reasoning to the contrary; and, in high Probability, very often to the Detriment, if not to the Death, of their Patients.

Without doubt, that late famous Divine, Dr. SOUTH, had an Eye to this Foiblesse of Physicians, when he pass'd that merry Witticism upon them; viz. "That a Physician's chief Consolation, upon the Death of his Patient, was, that he died secundum artem."

The Spectator brings in, parallel with this, the Case of some modern dramatic Poets, whose Performances are damn'd by the Public, or Audience, on account of their exact Conformity with the prescribed Rules of the Drama. But then 'tis always to be understood, in these Cases, that this nice Observance of the poetic Art is to supply the Want of Invention and Fancy, or (in other Words) of Fire and Capacity.

The Parallel here drawn by the Spectator, betwixt Physicians and Poets, is very just, with regard to many Proficients in both Spheres. But however, as there are many Exceptions in the poetic Sphere,

Sphere, so indeed there are some in that of Physic. Some Persons, in each, have manifestly Capacity and Fire enough to triumph over, and soar above, the Limits of the prescribed Forms. And the Tribute paid to Shakespear's Genius, as a Poet, may, in a comparative Degree, be applied to Dr. Morgan, as a Physician: For, as Shakespear scorn'd a servile Obedience to the prescribed Rules of Poetry, so Dr. Morgan has transcended the written Laws of Physic; and has, by that means, opened a Way towards rendering it (one Day) truly a Science.

But, alas! (which is much to be lamented) we have many celebrated Authors (especially Sydenham) who seem inclin'd, not only to discard, but likewise to explode, this arduous Research into the antecedent or most remote Causes of Diseases.

Sydenham (in several Parts of his Book, but particularly in his Preface) gives it up, as a Thing impossible to be attain'd. Indeed, he plainly insinuates, that we have no Business, nor any manner of Occasion, to look further back than the immediate Causes of Diseases; which, he says, will be a sufficient Light to us: And yet, in one Part of his Preface, he perfectly forgets himself, and expressly supposes, that these Inquiries into the true Natures and Essences of Things are highly necessary. Such Errors and Inconsistencies are the greatest Men sometimes liable to; and all for want of directing their Talents a right Way!

Dr. Cockbourn, in the Dedication to his Treatise of the Gonorrhœa, (which I profess to like much on the whole, though I can't yet subscribe to his Opinion, concerning the Seat of that Disease) beautifully illustrates the Necessity and Usefulness of such

such Inquiries. And, indeed, little Certainty can be attained to without them, whatsoever the zealous Advocates for the other Side (who pretend to place all Certainty in a nice and diligent Observation) have urged to the contrary.

I have many a time (to my great Mortification) had Sydenham quoted upon me, and objected to my Arguments, in behalf of a rational Practice. And how deplorable a Thing is it, that the most sublime, excellent, and useful Part of the medical Science, should be not only abandon'd, but even decry'd, by those illustrious Patrons, who should be the first Persons to inculcate, encourage, protect, and promote it!

Wherefore were those Societies and Academies (which bear the Stamp of Royal Favour and Sanction) instituted and establish'd, but to cultivate and promote natural Knowledge and Literature, and more especially the former? And since the illustrious Members of those Societies, in all Countries, (of which the most celebrated Physicians always constitute a Part) manifestly busy themselves about the Solution and Explanation of very trifling Phænomena, and such as tend to no real Use, it is much to be wonder'd at, and deplor'd, that they don't take the more important and momentous under their Consideration likewise. Be it understood, however, that I am not about to depreciate the Labours and Transactions of those celebrated Societies: No; far from it! I acknowledge, their Discoveries and Improvements (as eminently appear by the Transactions of our own particular Society) are not only curious and entertaining, but very learned and ingenious likewise. But then assuredly, some Things, they have discuss'd with a great deal of Labour and

Accuracy, may be call'd Trifles, in a comparative Sense; that is, as compared with other Things, which are of much greater Moment and Importance to the Welfare and Happiness of human Kind. And I must confess, (for my own part) I would rather hear or read a just and accurate Solution or Explanation of a Disease, than that of a Meteor. However, I must nevertheless acknowledge, that the Design, even of these Things, is very laudable; that is, 'tis to prompt and instruct People, to employ and exercise the same Turn of Reasoning in every other Sphere, and (in a word) to cultivate, strengthen and enrich their rational Faculties.

Now, were the Physicians in each of these Societies canton'd into different Bodies, or determin'd into different Committees; and (that done) were each of the supposed Committees to take a certain Disease, or Class of Diseases, under their Inspections and Considerations, and to discuss them rather in a rational and philosophical, than in an historical Light, they, by that means, might, and undoubtedly would, put Physic upon a much better and surer Footing than it is at present.

By this means a general System or Codex might be compiled, and such as would communicate a true Light and Knowledge of the Things treated on. Such a Thing would be an excellent Guide to the young Physician: Nor would it be altogether useless, perhaps, to the more Aged and Experienced. But, besides these Advantages, when People were accusom'd to read rational Systems, they would naturally incline to think, judge, and conclude, in a rational Manner; which is not the Case (in general) at this Day.

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In such a System or Codex, besides a rational or mechanical Explanation of Diseases in general, with all their respective Symptoms, and other Phænomena, the more just, authentic, excellent, and useful Observations and Theories of other Writers might either be recognized, or referred to, by pointing out the best and most useful, both of one and the other. By this means, again, the reading of numerous Volumes might be spared, and the Student be much better instructed and enlightened, by attending the closer to those that are more essential and useful. But to resume my Purpose:

Let us (for Example) look into epidemic Fevers of the contagious Sort. Nobody, I presume, will deny, but that these Fevers may proceed from either of the following Extremes; viz. either from an Over-thickness and Viscidity of the Blood and Humours, or from too great a Tenuity and Rarefaction of them. Now, as to the antecedent or most remote Cause, nobody (perhaps) can assign an absolute and definitive Account for it, because those Things really lie without the Confines of positive Determination and Conclusion: But as to the mediate Cause, it may and ought to be consider'd and determin'd on, before we set about a Cure. And as to the immediate Causes of any Disease, I think they may easily be judg'd of, and ascertain'd, by any Person of a moderate Capacity: Ex. gr. Suppose any Number, Order and Degree of Symptoms; 'tis easy to infer and conclude, from the Symptoms themselves, whether the Solids are too rigid and tense, or too lax and weak; as also, whether the Fluids are too viscid and sily, or too rare and thin: And, moreover, it is easy to guess, whether the par-

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ticular Symptoms result from simple Obstruction, or from Stimulation or Irritation. Now, that the Essence, or mediate Cause, of the Disease, does consist in some one or other of those already named, or else in some intermediate, distemper'd State, of the Solids and Fluids, (but more especially the latter) is certain: As it is likewise sure, that the Causa proxima, or immediate Cause, of the Disease, consists in the particular Actions and Dispositions of the morbid Matter; that is, either in its Obstruction and Stagnation, or in its Stimulation and Irritation. Therefore it must be highly necessary and expedient, to know, 1st, what this distemper'd State of the Fluids and Solids is; and, 2dly, to judge of their Actions and Dispositions; as, whether they are stagnant, and at Rest, in the Glands, and capillary Arteries; or whether they are in a State of Fluxion and Irritation: Otherwise, how shall we be able to rectify all these Things?

But notwithstanding the Clearness, as well as the Force and Truth, of this Reasoning, we see some Gentlemen of the Faculty (at this Day) who applaud and recommend Sweating universally; and others, who explode it as generally. These Opposites are (alike) Systemarians, and are govern'd by Whimsy and Caprice, more than by Reason; for the former prescribe Sweating to every one, and upon all Occasions; whilst the latter will scarce come into it, upon any Occasion.

Some Physicians prescribe in the same Key, for Fevers of all Species and Denominations: Ex. gr. Powder of Crabs-claws, &c. And how preposterous must it seem, to see Physicians of great Learning and Ability adhere to Modes and Fashions,

Fashions, or (which is as bad) pursue their own Whimsies, without ever appealing to Reason? One Physician shall confide solely in Absorbents, another blisters upon every Occasion; this Person shall depend altogether upon Purging, whilst another has no other View than bleeding a Distemper away: And there are others yet, whose whole Faith and Force are centred in Glysters. And whilst, on the one hand, there are some Physicians, who (as above-observed) sweat their Patients eternally (no matter how, or with what); there is another Set of Men, who have no View, but to cooling and repressing the inordinate Ferments and Sallies of the Blood; and pretend to cure all Sorts of Fevers, with Cream of Tartar, and Sal Prunellæ. And such preposterous Systemarians as these, we have of every Kind.

The Neapolitan Physicians of this Day have espous'd a Scheme that is very singular, and, indeed, seems to border a little upon the Romantic. They treat all their Patients (no matter what the Disease) with Water only, which is artificially chill'd, within a Degree of freezing: Of this they make their Patients drink very plentifully (absolutely debarring them all other Sustenance) for the Space of ten, fifteen, or sometimes twenty Days, if they don't kill or cure the Patient sooner.

I cannot help observing, that the Physicians of a certain State or Republic, neighbouring to England, do almost universally ascribe every Fever to an Offence of the Bile-acre, without giving themselves the Trouble to seek for any other Cause: And yet their Methods of Cure don't seem consonant even with that Notion; except it be allowed, that

Crabs-eyes, and diaphoretic Antimony, are equal to all Demands upon that Occasion.

Physic, in some foreign Dominions, is in a State of real Vassalage, and especially in some of the States of Italy. There the Physicians are tied down (in a comparative Sense) to prescribed Rules, or set Forms: As for Example; If this is the Disease, that is the Method the Physician must use, and not swerve from it, at his Peril. Who would be a Physician upon those Terms? That is reducing Physic to a mere servile Art; or rather, 'tis divesting it of Art.

The ingenious Author * above-mentioned very pathetically bewails the Darkness and Misfortune Physic now lies under. His Words are these: " Nothing is more to be wish'd for, than that we
" could arrive at such a Perfection in Physic, as
" to be able to distinguish, with some Certainty,
" the Difference of Diseases in their Beginning;
" and that a happy Guess was not, even at this
" Day, so great a Part of the Character of a
" good Physician." In another Place he says,
" Diseases have that surprising Analogy, that we
" cannot find out the true Nature and Essence of
" one Distemper, but the Nature of some other
" will be made manifest by it: So that a general
" Knowledge arises from a particular Inquiry," &c. &c. But this Thought may be carried yet further: Ex. gr. Let any Physician set about, and resolve to make himself perfect Master of any one Disease; that is, let him marshal together in his Mind all the Causes that could possibly contribute

* Dr. Cockbourn.

or give Birth to it (whether the antecedent, mediate, or immediate); then let him define and determine with himself, concerning its true Nature and Essence; and lastly, let him state and adjust the Intentions of Cure, and the necessary Instruments or Remedies wherewith to execute them: Though this Task might seem arduous and tedious at first, and (perhaps) might cost him several Hours severe Reflection, yet, I dare say, he will find his Pains well-recompensed in the End; for the just and perfect Definition of a single Case will increase both his Desire and his Aptitude, to bring all the Diseases he futurely meets with to the same Test of Reasoning. And how glorious a Thing would it be, to see Physicians explain and account for Diseases, as Philosophers do for the other Phænomena of Nature!

Physic (as Dr. Cockbourn observes) will certainly be better'd, in proportion as it approaches towards a mathematical Demonstration. And Dr. Morgan is for reducing every Disease to a Calculus; that is, tracing it up to its original or most remote Causes: Which (whether attainable, or not) 'tis certainly every Physician's Duty to endeavour at.

The learned, and justly renowned Dr. Mead, was (I think) the first Person who opened the Way to mechanical Reasoning, in the Sphere of Medicine; and he very happily illustrated the Beauty and Usefulness of bringing the proper Subjects of Medicine under a mechanical or a philosophical Consideration: But then his Essay only respected a particular Sphere or Branch of it, viz. that of Poisons.

But as the Nature of Poisons, and their Actions and Effects on human Bodies, are to be clearly accounted for, and explained, (as 'tis evident they have been, by the celebrated Author just now mentioned) so may every Disease incident to the animal Body; at least, in a comparative Degree. To obviate and illustrate this Truth, let us only consider the Nature of Diseases in general; then compare them with more genuine, abstracted Poisons, and afterwards subtract the Difference.

A Disease, of whatsoever Kind or Denomination it may be, is constituted (at least, generally speaking) of noxious Humours, which offend either in Quality or Quantity, or in both, perhaps. And these Humours may either be generated and formed in the Body, or be imbibed and received into it. And, first, That very many and severe Diseases are generated by Errors or Defects in our natural Secretions, is (I think) as demonstrable, as that two and two make four. Some, indeed, (and those not a few) arise from Errors in our Accretions; witness the many fatal chronical Diseases which proceed from Intemperance, especially in Drinking. But, which way soever the noxious Humours, constituting Diseases, are produced, viz. whether it be from the Perversion and Depravation of the animal Juices, or by the Intromission or Generation of others, foreign to the natural Constitution; the Actions and Effects of the supposed Humours will always be proportional to their respective Qualities, Quantities, Determinations and Motions, bringing (at the same time) the particular Constitution into the Computation.

*It is evident, to a Demonstration, that the mor-
bific Matter, productive of some pestilential, and
other contagious Diseases, (though, as to its Sub-
stance, commonly thought to be no more than a Miasm,
or Vapour) is as rank a Poison as any in Nature;
for daily Experience, as well as undeniable Tradi-
tion, informs us, that they will speedily overcome
and kill the strongest Bodies, in spite of all the Force
and Power of Nature and Medicine. What could
corrosive Sublimate, or Arsenic, do more? Nay,
the Pre-eminence should be deservedly given to the
former; for I have been credibly inform'd, that
some Persons have swallowed several Grains of Sub-
limate, (being first perfectly dissolved in a Liquid)
and, to their unspeakable Disappointment, have
survived it.*

*Have we not many Instances, to prove that the
febrile Matter, or other noxious Humours, being
determin'd critically, and concentrated in one or more
Parts, shall produce Gangreens, Mortifications, and
Death? And what could the rankest abstracted
Poison do more? But though it is evident, that
such Humours as are very virulent in their Nature
produce very violent Effects; so 'tis alike plain, that
there are other noxious Humours of a subordinate
Kind, which offend, indeed, but in a Degree pro-
portionate to their respective Natures, Qualities, &c.
And such as these, even though they may be either
corrected and subdued in the Body, or expell'd out
of it by the Help of proper Medicines, yet may they
very justly be deem'd poisonous.*

*But I shall undertake to make the Justice of
this Distinction (which, perhaps, may seem some-
what new) appear, by a familiar Comparison.*

The

The whole Tribe of genuine, abstracted Poisons, are call'd so only, when they are taken in such Quantities as to destroy the Mechanism of the animal Body; that is, kill: And the rankest Poison in Nature would dispute the Justice of that ignominious Title, except where they produc'd the like Effect.

There are some Sorts of Shell-fish, which are commonly call'd Poisons; especially if gather'd at certain, particular Seasons of the Year, and in particular Places of the Sea (I suppose, certain Beds, impregnated with noxious Minerals). I have seen several Instances of Persons, who, upon eating Muscles, (for Example) have been swoln and bloated in such a manner, that the ill-judging Spectators have immediately pronounced them poisoned. And, indeed, the Effects have, for a time, very nearly resembled those of some Poisons. But then, so soon as these Effects have yielded to the Force of Nature, or the Power of Medicine, the Infamy has been softened, and the Muscles deem'd only poisonous: Whereas, had the Persons, all or any of them, died of it, the Fish had very justly incurr'd the odious Name of Poison.

What can be more just than the Parallel here drawn, betwixt the respective constituent Humours of various Diseases and Poisons? And, especially, if we consider both, with regard to their Effects on the animal Body? The milder Poisons (except taken in immoderate Quantities) are easily corrected or expell'd, by proper Applications of Medicine; and so are the milder Sort of morbid Humours, constituting Diseases, unless neglected, or injudiciously treated by Medicine.

Morbid

Morbid Humours, of the most corrosive and virulent Nature, generally baffle the utmost Efforts of Nature and Medicine. And the Case is commonly the same with the more corrosive and virulent Poisons: Though sometimes (as above-observed) such of them as have been dissolved in some Liquid, and taken in moderate Quantities, have been either corrected or expell'd, by the Application of proper Medicines.

Now Poisons (or at least the major Part of them) are things that fall under the Cognizance of our outward Senses; whence we are enabled to make a nicer Scrutiny into their respective Natures, and constituent Parts, and consequently better instructed how to adapt a Remedy or Antidote to them, than we could possibly be, provided their Essences were invisible, or hid from us. But this is not the State of the Case in Diseases, especially in all Fevers.

Indeed, the outward and visible Symptoms of a Fever are always sufficient to instruct the most ignorant Observer, that the diseas'd Person has a Fever. And according to the Nature, Number, and Violence, of the Symptoms of various Fevers, they claim and obtain different Distinctions or Appellations: As, for Example, the Ephemeris, or simple Fever; the ardent Fever, the putrid, the malignant, the pestilential, &c. Here then lies the Difference, betwixt the poisonous Humours, which are the real Essences of the Diseases they cause and subtend, and the constituent Parts of more genuine, abstracted Poisons: The latter are Objects of Sight, and are subject to Scrutiny and Examination, by means of which we may inform ourselves of their most latent Qualities, and ultimate Mixtures and Prin-

Principles; but the latter are hid from us, and are only Objects of Conjecture and Guess. Seeing then that we are so much in the Dark, concerning the Nature and Essences of many (not to say most) Diseases, surely it ought to be our chief Aim and Study properly to shape, cultivate and direct our rational Faculties; to acquire, as much as possible, an Aptitude and Facility in solving all the various Phænomena of Nature, amongst which Diseases are very properly comprehended. And this is only to be acquired by considering and discussing Things in a mechanical or philosophical Light.

The following Treatise is given as a Sketch or Model, not as a finish'd Piece: I leave to Time, and more able Pens, to raise so glorious and useful a Superstructure. However, this (I am confident) will (or may) be of great and present Utility. And moreover, I hope it will be sufficient to point out which is the most useful and most eligible Pursuit: And that the Method I shall use, in explaining and accounting for the Causes, Natures and Essences of Diseases, and in stating their respective Intentions of Cure, will influence Mankind to the Choice of it, and direct them in the Pursuit of it; which, as I am confident it will tend to the Benefit of human Kind, so it will amply recompense me the small Pains I have been at.

*We have amongst us many Regularists, who reproach and stigmatize unqualified Practitioners and Dealers in Nostrums and Arcanums, with the odious Names of Quacks or Empirics. They censure and brand them with these hard Names, because they give what they know little or nothing of, to cure they know not what: And for that Reason
they*

they are (and very justly) deem'd Quacks, or Empirics. But where is the Difference betwixt the Accusers (some of them, at least) and the Persons accused? Many of the former undertake to cure Diseases, without knowing, or so much as endeavouring to discover, their respective Causes, Natures and Essences; and are, perhaps, equally unattentive to the proper Indications of Cure. Is not this acting alike blindfold? For, though they know the bare Name of the Disease, and the reputed Virtues of the Medicines they prescribe, yet are they very likely (if not equally so, as Quacks) to err; except they take Pains to search out the true Causes, Nature and Essence of the Disease, and its proper Intentions of Cure.

*The Necessity for making such Inquiries, before we attempt the Cure of any Distemper, (if we would act like Philosophers, as well as Physicians; and 'tis scarce possible to be truly the latter, without a Mixture of the former) will plainly appear from the following Argument; viz. I lay it down, as undeniable Truth, and Matter of Fact, that, in different Subjects, the same specific Cause may produce different Effects, according to the Diversity of Persons Constitutions, or as the suppos'd Cause may be differently determin'd and dispos'd. This being granted, it will necessarily follow, that different Causes, repos'd in various Subjects, may produce the same Effect; as, I promise myself, it will be made plainly to appear in the following Treatise. Of how great Importance then is it, that a Physician should diligently inquire into, and discriminate betwixt, Causes and Causes! Determine with himself, concerning the true Nature and Essence of
the*

the Disease under his Inspection; and, lastly, state the Intentions of Cure, before he makes Choice of the Instruments or Means to cure with! But there are, to my Knowledge, many Physicians, (I mean, in foreign Countries; for God forbid there should be any such in our own) who, though great in Repute, are mere Quacks in Dispute---or Reasoning, which amounts to much the same thing. And these are the Persons (next to the Student, and young Practitioner) I would endeavour to inform, or rather reform, &c.

'Tis most certain, every Capacity is not equally capable of being formed and informed in these Particulars: But nevertheless, every one who designs to exercise himself in so important a Sphere as the Practice of Physic, ought (after he has acquired a competent Knowledge of Anatomy, and the animal Oeconomy; of the History of Diseases, with all things relative to it, and the Materia Medica) diligently to endeavour at the Culture and Improvement of his rational Faculties, and his natural Capacity, in solving and explaining all mysterious Phænomena; but especially the Diseases incident to human Bodies. And it must be by this means, and this only, that the Practice of Medicine (the most excellent, as well as useful, in Nature) can be rescued from the Chaos of Empiricism; from the narrow Limits which have chain'd it down to the Appellation of an Art, and to raise it to the true Type and Dignity of a Science.—A Change, which will at once reflect Honour on the Profession, and greatly contribute to the Good of human Kind.

Though I so earnestly recommend and urge the Necessity, Usefulness and Excellency of mechanical
or

or philosophical Reasoning, in the Particulars above-mentioned; yet be it not imagin'd, that I am about to reduce Physic into mathematical Theorems, or that I mean to bring it to the Test of a mathematical Demonstration: No; those Things would be foreign to my Opinion, as well as to my Design. And perhaps it may (when justly summ'd up) be found true, what an ingenious and accurate Writer has observed concerning the mathematical Gentlemen of the Faculty; viz. That the Persons who have been most conspicuous for their Labours that way, have rather perplex'd and confounded the Cause, than added real Light to it.

Neither would I have it thought, that I am about to exclude or invalidate the Necessity and Usefulness of wholesome Theories, and a diligent and accurate Observation on the various Changes in, and Events of, Diseases, as well as on the Success of the various Medicines applied to them: No, no! I acknowledge these Things are highly necessary, and should be well attended to. But nevertheless, after all, a well-shap'd Reason, and sound Judgment, ought always to sit as Umpire.

What Darkness and Confusion have not the Systemarians and Methodists (a Pest which every Age has produced, more or less of) brought upon Physic? And what fatal Damages have they not caus'd to the poor Objects of it, the Sick? Infinite, alas! But I think the Physicians of the present Age (especially within the Confines of Britain, and its Dependencies) are pretty well purg'd of such Vermin.

The Design of the following Work (in which I shall pursue and adhere to my Purposes, with the utmost Strictness) is, in part, calculated to dissipate any Remains of such barbarous Superstition and Enthusiasm, and to correct and mend Errors and Defects of other Kinds.





THE INTRODUCTION.



BEFORE I descend to treat of particular Diseases; to define and explain their respective Causes, Natures, and Essences; to consider and set forth their Intentions of Cure, and to propound and recommend proper Instruments to execute such Intentions; it may not be amiss, that I premise something concerning the Source and Origin of Diseases in general.

Amongst the Tribe of Systemarian Gentlemen, we have had some who place the Source and Origin of almost all Diseases (for, I hope, they would except the pestilential, as well as other contagious ones, from that Deduction) in the Solids: *viz.* They pretend to maintain, that the Solids are either preternaturally rigid and tense, on the one hand; or else too lax, weak and flabby, on the other.

There are others, again, (of the same Tribe) who charge the Spring and Source of all Diseases on the Fluids, and would exculpate the Solids intirely: *viz.* These will have it, either that the complex Fluid, the Blood, is too rare, thin, and rapid, on the one side, or too thick, viscid, and sily, on the other; and that these various and opposite ill Conditions of it are the real and sole Parents of all Diseases.

That all these, respectively, are sometimes Circumstances in Diseases, and even mediate or subordinate Causes of them, is certain: But then, the diligent and judicious Physician should seek yet for a more remote Cause, on which these depend, and from which they are really produced.

Some Writers (of better Invention and Judgment than those I alluded to above) have pronounc'd the human Body an *Automaton*; and have, very justly, compared it to a Watch, or a Piece of Clock-work.

That the human Body is constituted and fram'd by mechanic Laws, is certain; and as it is the Work of an omnipotent Hand, so it is certainly the most exquisite Piece of Machinery in Nature.

Daily Experience informs us, that Clocks and Watches are subject to Distemperatures and Disorders: And, considering the changeable Nature of the Air, (the *Medium* they move in) 'tis impossible they should be otherwise; for as the Air becomes more rare and light, or more gross and dense, than it ought to be, so it will either accelerate or retard the Motions of these Machines proportionally. How much more so, then, (as the human Body is infinitely more delicate in its Frame, and is compos'd of infinitely more Parts and Movements) must we be subject to Disorders and Diseases, from the very same Cause, *viz.* the Air we live and breathe in? Not to mention many others.

The Air is capable of affecting both our Solids and our Fluids, in all the various Manners above-mentioned; especially (and very sensibly so) in the Bodies of those, whose Springs of Life and Motion are sensibly the worse for wearing.

Indeed, there are some Persons, in the Flower of their Youth, and of robust, Athletic Habits, who may pass through all the Changes and Vicissitudes of Air, without feeling any sensible Disorder or Inconveniency, for whole Years together: But, alas! these are *raræ aves in terris*; and these too will probably feel

feel the Depressions of Spirit, &c. from a gross, foggy Air, or a preternatural Elevation of it from the opposite Extreme.

But the primeval and principal Sources of most Diseases, whether acute or chronical, are Errors in our Accretions and our Secretions; especially in the latter: And these (particularly that of Perspiration) are liable to ebb and flow, according as the Condition of the Air varies. And it is to this unequal State, or reciprocal Ebbing and Flowing of Perspiration, that very many fatal Diseases owe their Rise.

Besides the many Inconveniences and Mischiefs that result to us, from this Variableness in the natural Temper and State of the Air, it is likewise the Chancel, through which many others are conveyed to us; for it is the *Medium*, in and by which all pestilential, and other noxious *Effluvia*, are brought to us.

But, besides these Mischiefs, and many others which we receive from the external Air stopping up our excretory Pores, or at least narrowing their Orifices, it is yet liable to further Accusation: For, as that recedes from a proper Temper, to the Hot, Thin, and Rare, or to the Cold, Gross, and Dense; so it will affect the expansive Force of the Air contain'd in our Blood-vessels, &c. by which means both the Fluids, and their containing Vessels, will be subject to Disorders and Distemperatures. How careful then ought we to be in the Choice of the Air we live in, that it be good, not only in a general Sense, but particularly adapted to our Constitutions likewise, if they require it!

Besides the many Distemperatures and Diseases which result from Errors in our Secretions, there are various others, which spring from the opposite Cause, viz. from Errors or Abuses in our Accretions; as, for Example, in the Things we daily eat and drink. How careful then ought we to be, that our Meats

and Drinks are well-chosen, and duly proportioned !

Moreover, the Foundations of numerous Diseases (especially of the chronic Kind) are insensibly laid by an erroneous or undue Use of the *Non-naturals* in general. But before I dismiss those two grand Sources of the Diseases we are incident to, (*viz.* Errors and Abuses in our Accretions and Secretions) I will take a nearer View of them : And that I may not be censur'd of imposing a mere *ipse dixi* upon the World, shall endeavour to explain and demonstrate, how, and by what Mechanism, they produce these unhappy Effects. And, first, as to our Accretions.

Our Aliments, (whether Meats or Drinks) if not judiciously chosen, and duly proportion'd, must necessarily prove injurious and offensive to our Constitutions ; and the suppos'd Injuries or Offences which we sustain from them, will be in proportion as they are in themselves, too gross, impure, or hard of Digestion, or as they may be immoderately taken.

If our Aliments should be imbued with any poisonous, or other noxious Qualities, (foreign to their own Nature) which is sometimes the Case, they will, at least, stimulate both the Solids and Fluids inordinately ; excite preternatural Motions and Ferments in the Blood and Humours ; and finally, perhaps, vitiate the whole Fluid, if not totally convert it into their own specific and morbid Nature.

How many Instances have we to prove, that a voracious Meal, even of wholesome, well-adapted Food, as to its Quality, shall cause a Surfeit !

Sometimes, indeed, these Surfeits shall be confin'd to the first Passages, or alimentary Duct : At other times, however, they are extended to the Blood ; where they have been known to vitiate, not only the whole System of the animal Juices,
but

but to violate the Nerves and animal Spirits likewise.

We have but too many Examples, to prove, that one single Surfeit of this Sort has sometimes brought on fatal acute Diseases; and, at others, precipitated Persons into Maladies of the chronic Kind.

That every Error in our Secretions (whether of Excess or Defect, but more especially the latter) does, and necessarily must, (in a greater or less Degree) sap the Foundation of Health, and a good Constitution; this is (I think) the most obvious Truth in Nature. And this will appear plain and evident, if we only consider, first, That the Blood of an animal Body is a complex Fluid, constituted and compos'd of many particular Kinds. Secondly, It is necessary, in order to the Conservation of perfect Health, that all and each of the supposed Individuals should maintain their due Proportions, and the whole Mixture a due State of Fluidity and Motion.

Things being thus circumstanced, indeed, it may then be compared to a well-temper'd Sauce, where nothing is either predominant or deficient. Now it is plain, a Sauce so constituted will be pleasing to the Palate, as well as amicable and easy to the Stomach; and when it gets Passage into the Blood, will afford a benign, wholesome Nourishment. Just so, in like Circumstances, will it be with the Blood, viz. when all its component Parts are duly proportioned, in an absolute, as well as a relative Sense: But as soon as this *Æquilibrium* is broken, and that any one of the constituent Parts or Humours either lacks or abounds, the Whole will then become noxious and offensive.

Let us only marshal together, in our Mind, all the more remarkable Humours, or particular Fluids, of the Blood, and afterwards take a serious View of them. There is (besides the *Crassamentum*, or Mass) the

the Urine; the proper Matters of sensible and insensible Perspiration; besides another, (which we look upon to be yet more subtle) call'd the Matter of insensible Transpiration: There is the *Bile*, the pancreatic Juice, the *Saliva*, *Sperm*, *Pus*, &c. (for, I think, Dr. *Keill* recognizes above thirty particular Sorts, in his *Tentamina Medico-Physica*) Now, is it reasonable to suppose, that any one of these (especially of those that are destin'd to be secreted in greatest Plenty) can either lack or exceed, in any considerable measure, without exciting disagreeable Perceptions in the Body? No, surely!

The Effects of a redundant, or of an obstructed *Bile*, are too notorious to need relating here. A Suppression of Urine, or (its Opposite) a Proflux of it, rarely fail to create internal Disorders of some Sort or other. The thin, saline Matter of insensible Perspiration, when unduly retain'd in the Blood, generally produces a Fever, except critically deposited upon some particular Part or other; where, however, it will excite Disorders proper and peculiar to the respective Part or Parts. As for Example: If upon the Stomach, *Ructus's*, *Flatus's*, Sickness, and Vomiting: If upon the Guts, Colics, Belly-fluxes, and the like: If upon the Breast or Lungs, Coughs, peripneumonic or asthmatic Disorders, &c. If upon the Gums, the Tooth-ach: Upon the Eyes, sharp Defluxions, and, perhaps, Inflammations. And so the Parallel may be run through the whole Constitution. But to sum up this Argument in few Words: As there are, in animal Bodies, divers Humours, of different Natures and Qualities, as, some that are soft, slimy, balsamic, and mucilaginous; and others, that are saline, sharp, and pungent; so, as the former or the latter may become redundant, they will either obtund and clog too much, on the one hand, or stimulate and irritate too much, on the other.

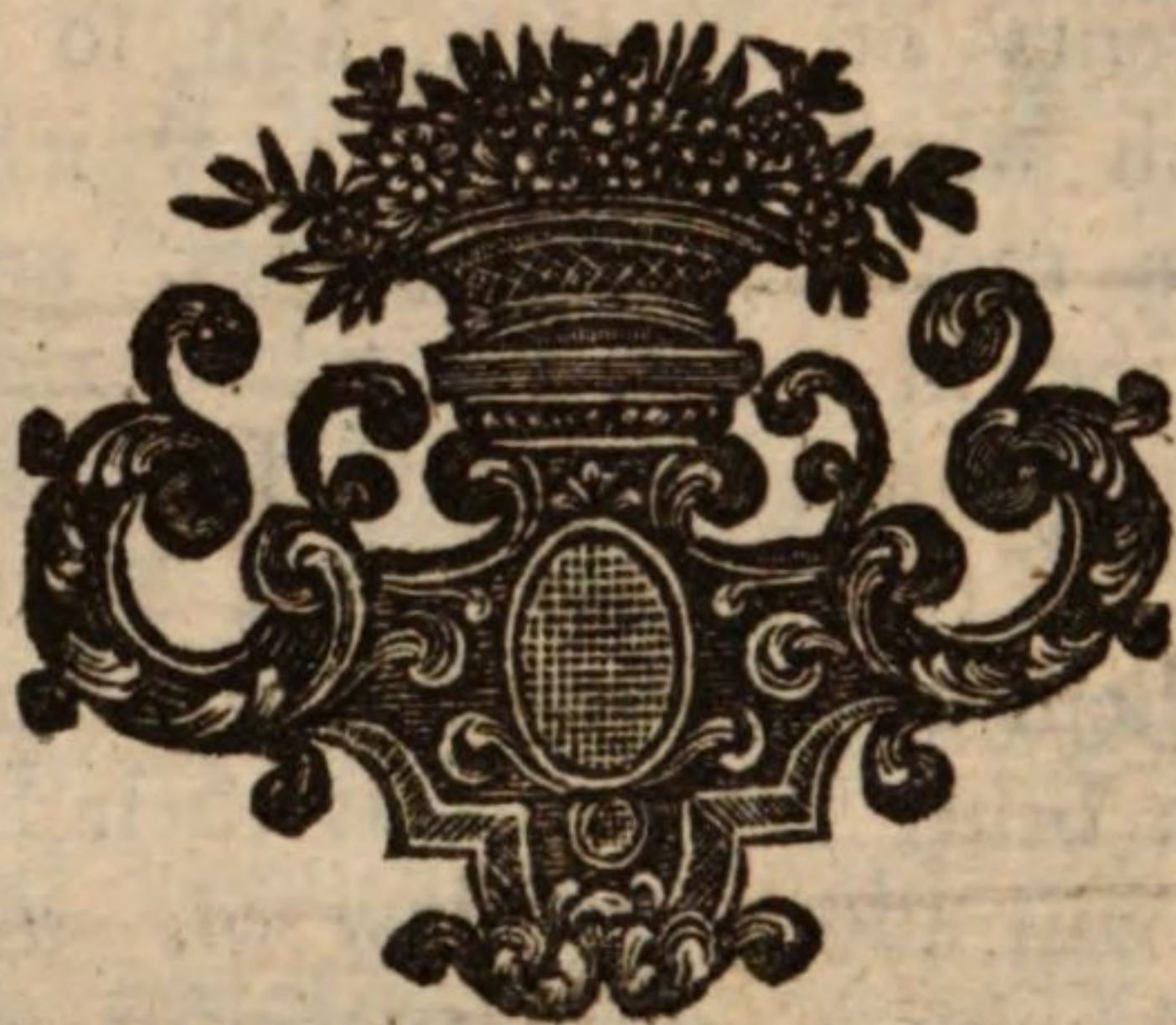
Upon

Upon the whole: When we reflect on the infinite Delicacy of the human Fabric, the great Variety of its general and particular Parts and Functions; the infinite Number of Nerves, Blood-vessels, and Strainers; and that every one of these is capable of duly and perfectly acting its Part, for the Space of whole Days, Weeks, and Months; and if, at the same time, we reflect on the Difficulties and Dangers that beset us; we cannot help owning, that it abundantly specifies and manifests the Wisdom and Goodness of the Almighty Architect.

But I shall here propound one short (but general, and, perhaps, extensive in its Effects) Rule, whereby to elude the Access of many of these Causes, on the one hand, and to prevent the Generation of the rest, on the other: *viz.* 1st, Let all Persons (even in their Infancy, when under the Eyes and Directions of their Parents or Nurses, and so forward) be nourish'd with wholesome Food; which should be given only in moderate Quantities, and at proper Times, or rather at stated Periods. 2^{dly}, Let them be used to frequent Immersions in cold Water, or to cold Baths, if to be had. 3^{dly}, As they advance in Age, let them be constant in the Practice of Riding, and such other Exercises as their Strength and Constitutions will admit or allow of. And by these Means and Methods, duly practised and pursued, the *Æquilibrium* or Balance of Nature will be preserved inviolate; and the Access of external, or the Generation of internal, morbidic Causes, be prevented.

This is a short, easy, and effectual Rule or Method, not only to preserve Health, and prolong Life, but likewise to give a good Relish to Life: For by these means the attractive Force, or due Flexure of the Solids, will be preserved; the just and regular Circulation of the Fluids maintain'd;
the

the natural and necessary Secretions continued ; and a due Separation, and vigorous Action of animal Spirits, supported. And, under all these Advantages, 'tis easy to discern, that every thing must fare well: That the Mind, as well as the Body, will be *sui juris*, or (in other Words) in full Force and Virtue.



A N
E X P L A N A T I O N
O F T H E

A B B R E V I A T I O N S *of the* Q U A N T I T I E S,
made use of in the P R E S C R I P T I O N S in
the following T R E A T I S E.

lb. *stands for* Pound of dry Things, } *consisting of* oz. xij.
 ————— Pint of Liquids, }
 oz. ————— Ounce, *consisting of* dr. viij.
 dr. ————— Drachm, ————— scr. iij.
 scr. ————— Scruple, ————— gr. xx.
 gr. ————— Grain.
 gtt. ————— Guttae, or Drops.
 m. ————— Manipulum, or Handful.
 f. q. }
 q. f. } ————— a sufficient Quantity.

A N E X P L A N A T I O N of some L A T I N W O R D S,
which are made use of in the P R E S C R I P T I O N S
of the following *Treatise*, being as commonly
known in the Shops of *Druggists, Chemists, or*
Herbarists, as the *English* Names themselves.

Aristolochia, Birthwort.
Arum Root, or Cuckow-pint.
Balneum Mariæ, a Bath of boiling-hot Water.
Calamus Aromaticus, or *Acorus*, the sweet Cane.
Cassia Fistula, the Pudding Pipe-tree, the Pulp of its Pods.
Catechu, Japan-earth.
Catholicon Electuar. the universal Purge.
Cochlearia utraque, sc. *Hortensis & Maritima*, the Garden and
 Sea Scurvy-grass.
Crystallus Mineralis, the same as *Sal Prunellæ*.
Daucus Creticus, Carrot of Crete.
Diacodium, Syrup of Poppy-heads.
Electuarium Diacarthamum, an Electuary made with *Bastard-*
saffron, or *Carthamus*.

xlii *An Explanation of some Latin Words.*

Electuarium Diasatyrion, an Electuary with the Roots of Satyrion.

———— *Caryocostinum*, the Clove and Costus Electuary.

Elixir Proprietatis, Elixir of Property.

———— *Salutis*, Elixir of Health, or Daffy's Elixir.

Frog-plaister: See the *Emplastr. de Ranis*, in the *Pharmacop. Augustan*.

Lac Sulphuris, Milk of Brimstone.

Lapis Hæmatitis, Blood-stone; a Sort of iron Ore.

Laudanum Opiatum: See the *Pharmacop. Augustan*.

Lignum Aloes, Wood of Aloes.

Lignum Vitæ, or *Guaiacum*, Pockwood.

Liquor Jovis, Sugar of Tin, dissolved into a Liquor in a damp Place.

Mel Ægyptiacum, the Scum of the Egyptian Ointment.

Millepedes, Wood-lice.

Pulvis ad Guttetam, Powder against an Epilepsy.

Rhodium Lignum, Rosewood.

Sal Prunellæ, Crystal Mineral.

———— *Polychrestus*, Salt of many Virtues.

———— *Volatile Oleosum*, Salt Volatile.

Satyrion, a Root called Dogs-stones.

Scordium, Water-germander.

Storzonera, Vipers-grass.

Semicupium, a Bath up to the Waist.

Species Aromatici Rosati, the Species of the Rose-spice.

Species Dianthi, Species of Rosemary-flowers.

———— *Diatrion Piperis*, Species of the three Peppers.

Sperma Ceti, Parmasitty, the Fat or Suet of the Cetus, Whale.

Spiritus Cochleariæ Purgans, the Golden Spirit of Scurvy-grass.

Stæchas, French Lavender.

Styrax, or *Storax*.

Succus Glycyrrhiæ, [inspissatus] Spanish Liquorice.

Tinctura Hieræ, or *Tinctura Sacra*, the Tincture of the Species of *Hiera Picra*.

N.B. If there should occur any other Latin Names of Medicines, the English Reader will find them in the Index to Dr. QUINCY's Dispensatory, and the Explanation of them in the Pages referred to. And as many of the English Names of Medicines may seem new and doubtful to such of the Readers as have been always accusom'd to read Prescriptions in Latin, they are likewise desired to consult Dr. QUINCY's English Index to the above-mention'd Book, where they will find the Latin Names joined to the English, in the Pages therein referred to.

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A
T R E A T I S E
O F
D I S E A S E S
I N
G E N E R A L.

B O O K I.
Of the Diseases of the H E A D.

C H A P. I.
Of the A P O P L E X Y.



T would seem that this Disease, (according to the Definition of the original Greek Term ἀποπληξία, or the Construction of the Latin Word *Attonitus*) was judged by the Ancients to result from a Percussion, or Stroak; as if impress'd by some external or extrinsic Power. That these Things may be, and sometimes are, the Causes of the Disease in Question, is not to be doubted of; and an Apoplexy may as well proceed from a Stroak

of Thunder, as from any other Cause or Accident whatever. But nevertheless, later Conjectures and Conclusions, founded upon the unerring Light of numerous Dissections, made upon the Bodies of such as died of that Disease, explain and prove the true Causes and Nature of it beyond Dispute; and make it plainly appear, that it is produced (commonly speaking at least) from an intrinsic or internal Cause.

It appears from the most accurate modern Observations in Anatomy, and the Inspection of various apoplectic Cadavers, that this Disease exists in, and proceeds immediately from, a Profusion of arterial Blood upon the Brain: Whence its containing Vessels (the Arteries) with their respective excretory Glands, and perhaps all other Glands that are adjacent or contiguous to them, are immoderately stretch'd or distended. Sometimes, indeed, the arterial Blood extravasates in the Brain; and then the Disease soon terminates in Death. But, whether this latter is the Case, or not, a total Apoplexy generally proves fatal, in spite of all the Help that is to be drawn from Medicine.

When the arterial Blood happens to extravasate in the Brain, or immoderately to distend its containing Vessels, the Consequence is always an Apoplexy. And the Reason of this will appear plain, if we only consider the Situation of the Brain, its proper Functions, and of what great Use and Importance it is to Life. These Things, or either of them, happening, the Brain will, of necessary Consequence, be wounded, bruised, or compress'd; and in either of these Circumstances, the Effects will be dismal, if not fatal. *Persecto vel pertuso cerebro, &c. lethale est*; says Hippocrates. Thus much of the *causa proxima*, or immediate Cause.

It is generally agreed, and maintain'd by the most reputed Authors, that the Persons who are most subject

to this Disease, are those that have short Necks; who live a sedentary, unactive Life; are too constant and intent in the Pursuit of hard Study; eat voraciously, or drink excessively.

That some Persons, under these Predicaments, do fall into Apoplexies, is very certain; and so do Persons who are formed, and live after a different Manner, tho' perhaps not so frequently: We allow therefore, that these Things are (*cæteris paribus*) the most common Parents of Apoplexies; that is, they are the *causa prima*, or most remote Cause. But it is not sufficient to know, that these Things are the first Cause or Foundation of Apoplexies, except we likewise know how, and by what Mechanism, they bring it about; else how shall we be able to prevent it? And Prevention is always allowed to be the easiest and best Cure, especially in this Disease; in which, (generally speaking) People have no Opportunity left to apply cautionary Methods after the first Fit.

The Nature and Essence of this Disease are sufficiently comprehended and expressed in the *causa proxima*, or immediate Cause of it. This, as above observ'd, is either an Extravasation of arterial Blood in the Brain; or else an immoderate Distention of its arterial Vessels: And, in Consequence of either, the Brain will be wounded, bruised, or compress'd.

Now, it will be allow'd, (I promise myself) that the Brain is at least the Seat, if not the Source of Life: For in it the animal Spirits are first elaborated and separated. 2^{dly}, It is the Place of their usual Habitation or Residence; and 3^{dly}, It is from thence that they are dispens'd to all Parts of the Body. Considering then the Importance and Use of the Brain, it will appear evident, that any of the above-mention'd Things happening, the animal Spirits will, in part, be lock'd up and obstructed, or restrain'd from their necessary Motions; and consequently the animal Functions will cease for a Time, (if not the vital ones

too) 'till the Disease yields to the Force of Nature or Medicine, or terminates in Death; in which State, tho' the animal Spirits cannot be said to be releas'd, yet neither are they confin'd or imprison'd.

I shall here consider, *First*, The Habit, or State of Blood which is most productive of this Disease. *2dly*, How the antecedent or first Causes, already assign'd, bring on that State of Blood; and *3dly*, How, or by what Mechanism, the supposed Habit of Blood tends to produce the Disease in question. And first, I conceive the Blood of apoplectic Persons to be (most commonly) either thick and grumous, or fizy and viscid. Sometimes it may (as indeed it evidently does) arise from a Cause diametrically opposite to those already mention'd; that is, from a Blood too much heated, agitated, and rarefied; as is the Case when it flows from Excess in drinking of spirituous Liquors, violent Exercise in hot Weather, or a Redundancy of hot, irritating Particles in the Blood.

The first and the last-mention'd Conditions of the Blood are alike capable of producing Apoplexies: The first, because they dispose the Blood to Stagnation and Obstruction; the last, because that Quantity of Blood pour'd into the arterial Vessels of the Brain, is too great to be resorb'd duly by the Veins. When such Stagnations and Obstructions happen in the arterial Vessels of the Brain, (and the Case would be the same, so far at least, any-where else,) its Passage is of consequence interrupted. The Blood's Action, or *Impetus*, still continuing, and perhaps increasing in proportion to the Resistance it meets with, at length preponderates and overpowers the Spring or elastic Force of the arterial Vessels, and so causes a sudden Inundation on the Brain.

The like Effect does sometimes happen from the last-mention'd Causes, *viz.* excessive drinking of ardent, spirituous Liquors, violent Exercise in hot Weather, &c. But then it is brought about by a quite opposite

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opposite Mechanism : For when the Blood is violently agitated, and its *Momentum* greatly augmented, by any one of the last-mentioned Causes, (which are very plain and natural Consequences of them) the Quantity pour'd in upon this or that Part may be too great to admit of a free Passage or Circulation ; in which Case the Vessels will necessarily yield to an irresistible Force and Pressure ; and if (unluckily) the Blood's *Impetus* should terminate critically, or more expressly upon the Brain, than any-where else, the Consequence will very probably be an Apoplexy.

Thus I have enumerated several Causes, which may first (with strict Propriety) be divided into Two Classes ; and may afterwards be subdivided into so many individual or distinct Causes : And as the two Classes of Causes are diametrically opposite to each other ; so the Individuals of each Class have their specific Differences, one from another. Hence it will appear highly necessary, that a Physician, when call'd to an apoplectic Patient, should summon together all his Faculties, and exercise all his Reason, in order to judge and discriminate betwixt Causes and Causes : And he who can judge and determine with most Certainty concerning the true, genuine Cause of the Disease that presents, has undoubtedly the fairest Chance to succeed in the Cure. — For, *Dato morbo, est remedium invenire.*

I shall not trouble my Reader with a long, tedious Recital of Diagnostics and Prognostics, either in this, or any other Disease I may hereafter treat of ; those Things being to be found to Exactness in abundance of Writers : But I shall proceed to recommend such Methods of Cure (preluding the proper curative Intentions) as are most convenient ; supposing the Disease, at different Times, or in different Subjects, to proceed from each of the Causes above-mention'd. And first, As to the Circumstance of a short Neck ; tho' it may contribute something to-

wards the Production of Apoplexies, (because such Persons, being generally very fat and fleshy, must hinder, in some measure, the Reflux or Return of the Blood from the Head) yet as that cannot be altered or remedied, so it would be needless to enlarge upon that Article.

The first Intention or Indication to be pursued in the Cure of an Apoplexy, (from what Cause soever it may proceed) is to draw a large Quantity of Blood (*viz.* 20, 25, or 30 Ounces) either from the Arm or Foot. That being done, we must, for our further Government, have regard to the particular Cause; which should be examin'd into with the greatest Sagacity and Accuracy.

If the Disease is judg'd to proceed from a thick, heavy, grumous State of Blood, the plain Intentions or Indications are (Bleeding being premised) to attenuate and irritate; that is, to attenuate the Blood, and increase its Fluidity; and at the same time, by irritating the arterial Vessels, to restore their *Nisus* or elastic Force, in such measure, that they may be enabled to repel the obstructing Blood, or push it forwards in the natural Way or Course of Circulation. When these Intentions are justly premised, and proper Instruments are made choice of to execute them, the Disease will be happily and speedily cured, if not in its Nature and Degree incurable.

I shall, in the Methods I recommend for the Cure of this, as well as of all other Diseases I may for the future treat of, avoid Prolixity and Confusion, (Things which are calculated, more to swell the Volume, or for the Profit of the Bookseller, than to inform and instruct the Reader) and endeavour to be as clear, perspicuous and concise as possible.

When an Apoplexy is judged to proceed from the Causes just now mentioned, I advise as follows. In the first place bleed plentifully in the Foot or Arm; but having Regard to the Strength of the Patient.

Apply

Apply a large and sharp Blister-plaister between the Shoulders; the same to the Arms and Inside of the Calves of the Legs.

At the same time apply irritating Plaisters (made with Cephalic Plaister, with a double Quantity of *Euphorbium*) to the Soles of the Feet.—Then

Take of the Carminative Decoction, oz. xij. Of thick emetic Wine, (that is not settled to be clear) oz. ij. Caryocostin Electuary, oz. j. Sal Gem. dr. ij. Mix for a Clyster, to be injected as soon as possible, and repeated every six or eight Hours, as Need requires.

Take choice Gum Guaiacum, dr. ij. Rhubarb, dr. ij. *Russia* Castor, dr. fs. Euphorbium, gr. x. Extract of black Hellebor, scruples iv. Balsam of *Pernu*, a sufficient Quantity to make a stiff Mass, which is to be form'd into sixty Pills; and let the sick Person take five every four Hours; drinking after them six Spoonfuls of the following Infusion.

Take Horse-radish Root slightly dried, oz. ij. Mustard Seed bruised, oz. j. The Species of Diambre, and Powder of Galangal, of each dr. ij. mix and infuse warm, the space of six Hours, in two Pints of White-wine; then strain, and to each Pint add Chalybeat Wine, oz. ij. for the Use before-mentioned.

That this short Formulary is not only proper, but altogether sufficient to answer the Indications I have laid down, I believe nobody will dispute me: What Need then of such long, confused, indigested Catalogues of Medicines? (the Sum and Substance perhaps of all the medicinal Legends for many Centuries past) when the needful, good and proper may be reduced to so small a Compass.

Emetics, especially of the antimonial Kind, have been recommended by many practical Writers, as well ancient as modern. But that Article I purposely omit, and leave it to the Discretion and Pleasure of the practising Physician, either to use or disuse them: For if the End proposed (of Revulsion) by a Vomit is not obtained, the Disease will very probably be rather aggravated than asswaged by it; as it is

very natural to expect, that either the Over distention of the arterial Vessels of the Brain, or the Extravasation of Blood in the Brain, will be augmented by the violent straining which is inseparable to the working of such Vomits; and which cannot fail to propel the Blood with increas'd Force upon the Brain.

When, upon mature Consideration, it shall appear to the sagacious Physician, that an Apoplexy is brought on by the Stagnation or Extravasation of a viscid, fizy Blood and Humours, the Intentions of Cure will be pretty nearly the same as in the Case above-mentioned; though some Alteration will be required in the Instruments to be made choice of for the Cure.

In such a Case, likewise, a plentiful Discharge of Blood is recommended; and, immediately afterwards, let the sharper Sort of Blisters be applied; and irritating Plaisters to the Soles of the Feet, as in the foregoing Case.

Take of the Emollient Decoction, oz. xij. Sea Salt, one spoonful:
Of thick Emetic Wine, oz. iij. Make a Clyster, to be injected as soon as possible, and as often to be repeated as Need requires.

Take the Antimonial Æthiops, (the Method of preparing which is described at the End of this Book) dr. iv. Gum Guaiacum, dr. i. ss. Rhubarb, dr. j. True Sagapenum strain'd, dr. j. Euphorb. gr. x. Syrup of the Five opening Roots, as much as suffices, to be beat well into a stiff Mass, from which are to be made sixty Pills; five of which are to be taken every fourth Hour.

Take distilled Parsley-water, and Fenel-water, of each oz. xij. Volatile Salt of Hartshorn, scr. ij. Tincture of Amber, dr. iij. Mix and make a Julep; of which drink six Spoonfuls, two Hours after each Dose of Pills.

Bleeding in the Jugular Vein is highly commended by some celebrated Authors, for apoplectic Disorders; and, indeed, I cannot but approve it: therefore rather advise the Operation to be perform'd in that Place, than any other.

Powder

Powder of white Ellebore, or Affarabacca-leaves, blown up the Nose, to excite Sneezing, may profit much; or the following Errhine.

Take the Leaves of the *Syrian* Herb Mastich, and the Flowers of the Lillies of the Valley, of each four Parts: White Hellebore Root, two Parts: Leaves of Affarabacca, one Part. Mix and make a Powder, to be snuft up the Nostrils; having first taken away a Quantity of Blood by Venesection.

Various Things and Means may be applied externally upon these Occasions; such as Semi-cupium, Frictions, Scarifications, &c.

When it shall appear, that an Apoplexy takes its Rise from a sanguineous Temperament; from Excess in drinking of ardent, spirituous Liquors; violent Exercise, or a Redundancy of hot, irritating Particles in the Blood; the Indications of Cure in such Cases, and the Medicines necessary to answer them, will be very different from those already described. Under this Supposition I advise as follows; *viz.*

Take of the Emollient Decoction, oz. xiv. Honey of Mercury, oz. ij. Linseed Oil, oz. j. Sal Gem. dr. iij. Mix and make a Clyster, to be injected as soon as possible, and repeated twice or thrice a Day, if need be.

Take Milk of Sulphur, dr. iij. *Poterius's* Anti-hectic, dr. i ss. *Russia* Castor, scr. ij. Rob of Elder, oz. ij. Syrup of Elder, a sufficient Quantity to make an Electuary, whose Dose is three Drams every three or four Hours, drinking after it four Spoonfuls of the following Infusion.

Take Decoction of Tamarinds, oz. xij. Manna, oz. iij. Syrup of Violets, oz. ij. Gauber's Salt, oz. j. Mix and give it.

The curative Intentions, supposing the Disease to proceed from any one of the Causes of this latter Class, will be nearly the same: For, such Medicines as sheath or obtund, cool and correct, and lastly, evacuate the offending Humours by gentle Stools, will very probably do the Business: But in case the Distemper

Distemper should not yield, after this Method has been pursued for a Day or two, Recourse may then be had to Blisters, applied to the Legs and Thighs; and irritating Plaisters (as cephalic Plaister, with a double Quantity of Euphorb.) to the Soles of the Feet. And at this Period (tho' not proper to be used sooner) they may be practis'd, not only with Safety, but with great Success likewise.

This Disease is so dreadful in its Nature, and, (generally speaking) so fatal in its Consequence, that those who have essayed one Fit of it, are under terrible Apprehensions, for fear of a Relapse or Return: And such (consequently) would be glad to embrace any cautionary Methods to prevent it. To such therefore I recommend Temperance in Eating and Drinking, particularly; and a regular and due Use of the Non-naturals in general. To these add the Use of *German Spaw Water*, inwardly; and frequent Immersion in cold Water or cold Bathing, (if to be had) externally. And, by the regular, continued Use of those Things, I dare be bold to say, that not only the Disease itself will be prevented, but likewise the Generation of all those various Causes which are necessary to the Production of it.

I flatter myself, that the judicious, impartial Reader will agree with me, That the Definition I have given of this Disease, with the proper Intentions or Indications of Cure that I have assign'd, (as it results from different Causes in various Subjects) carry the Face of *Vraisemblance*; and also, that the Instruments I have recommended for the Cure, under the different Circumstances, are proper and well adapted to each particular Case.

I have in this Disease (as I propose to be in all others I shall treat of) been very concise and compendious (tho' I hope substantial nevertheless) in the Methods I recommend for the Cure; and have rather chosen to be more copious in pointing out the

the true Nature and Essence of the Disease, with its proper Intentions or Indications of Cure. These latter constitute the real End and Design of this Undertaking; and the former is only incidental to it. *Dato morbo, est remedium invenire*,— was a favourite Maxim with the late Doctor *Pitcairn*; — a Person conspicuous for his Learning and great Abilities, and one (perhaps) of the greatest Genius's that have appear'd for Ages past. I confess myself a great Advocate to this his Opinion: For surely, the Physician who can justly explore the true Causes, Nature, and Essence of a Disease, can never be at a Loss to assign the proper Intentions of Cure; and much less the necessary Remedies wherewith to execute them.

I don't presume to direct this Lesson to the more mature Gentlemen of the Faculty, and such as have already been many Years conversant in the Practice of it (though I will be bold to say, not a few of them stand in Need of it); but, to Students, or young Practitioners: That they (who perhaps are yet unprejudic'd, and have a Prospect of exercising the Practice of Medicine for many Years to come) may learn and know, betimes, which is the more eligible Pursuit: That they may learn how to shape their rational Faculties, and be exhorted to improve them, and direct them the right way: And lastly, That they may pride themselves more in sound Reasoning, and good Judgment, than in the Pedantry of Schools, and voluminous Libraries.



C H A P. II.

Of the EPILEPSY.

THE Symptoms of this Disease, and the Manner of its Access, are so well known, as to need no Description here.

The *Epilepsy* (like some other Diseases of the nervous Tribe) generally attacks Persons periodically; though, perhaps, not at very exact Distances one Fit from the other; as is usually the Case in an intermittent Fever.

For the immediate Cause, or *Causa proxima*: This Disease appeals, either to a Deliquium of the animal Spirits; to a preternatural Reflux of them to the Brain; or else to their disturb'd, confus'd Motion in the Brain. But, whichsoever of these may claim Preference to the others, as to the immediate Cause, the *Causa media*, or second Cause, must necessarily exist; either in Disaffections and Depravations of the animal Spirits themselves, and the Nerves they flow in (which being granted, the Case is then absolutely and strictly nervous); or else in an ill State of the Blood, or ill Humours contain'd in it; which are thrown critically, and (as it were) periodically, upon the nervous System; where, acting with a preternatural Stimulus, they agitate the animal Spirits violently, put them into great Confusion, reverse their natural and proper Motions, and (as it were) suffocate them.

The Explanation I have here given of the second Cause, or *Causa media*, expresses the true Essence of the Disease. However, the last mention'd is, in my Opinion, the principal Cause of the Disease; though the Nerves and animal Spirits may claim some Share too: For, as a corrupt Tree will infallibly bring forth corrupt Fruit; so a vitious Blood will, more or less, vitiate

vitiate the Nerves, and taint every thing that is discern'd from it. And so, lastly, the animal Spirits may become, in themselves, vitious, as well as the Blood from whence they are derived.

Taking for granted, then, that this Malady has its principal Seat in the Blood; or, at least, in noxious Humours, which are there engender'd; we come now to inquire and scrutinize, so far as Conjecture will carry us, (for we can go no further) into their specific Natures and Qualities.

The morbid Matter, productive of this Disease, is, as I apprehend, no other than crude, unconcocted Humours, which are daily and gradually formed and heaped up in the Blood: And whenever a sufficient Quantity of the supposed morbid Humours is accumulated, they fall critically, and, as it were, with one Consent, upon the Brain and capital Nerves, and so produce a Confusion and Suffocation of the animal Spirits. This Conjecture, I think, is not void of Reason. But I am the more confirm'd in this my Opinion, by Arguments drawn *a posteriore*: For, upon the footing of this Supposition, I have succeeded very happily in the Cure of several epileptic Patients, by the Application of the following Methods.

Take fine Powder of Jesuit's Bark, dr. xij. Human Skull prepar'd, dr. vj. Best Myrrh, dr. ij. Castor, dr. j. *Mynsicht's* Tincture of Steel, dr. v. Let them be rubb'd together in a marble Mortar, until the Powder becomes of a brown or blackish Colour. To which add Rob of Elder, oz. iij. Syrup of the same, a sufficient Quantity; and make an Electuary of a soft Consistence, whose Dose is three Drachms. To be taken every six Hours, drinking after it three Ounces of the following Infusion warm.

Take Male Peony Root, oz. j. Valerian Root, oz. fs. Lime-tree Leaves, oz. j. Flowers of the Lilly of the Valley, Rosemary and Lavender, of each dr. iv. Seeds of Rue, dr. ij. Bruise them into a gross Powder, and infuse warm, for the Space of a Night, (the Vessel being close stopt) in White-wine, oz. xl. Afterwards strain for Use.

During

During the epileptic Paroxysm, it will be proper to advise Glysters, that are powerfully emollient, and gently irritating. A *Semicupium*, and Frictions, applied to the depending Parts of the Body, especially the Soles of the Feet, may help to shorten the Fit.

But supposing an Epilepsy to proceed simply and purely from a nervous Origin: We must, in that Case, vary a good deal in our Attempts to cure. As for Example: Instead of the above Method,

Take native Cinnabar, human Scull prepared, of each dr. iij. Gum Sagapenum, scruples iv. Assafœtida scrup. ij. Balsam Peru, a sufficient Quantity to make a Mass for sixty Pills. Let the Sick take five, three times a-day, at physical Hours; drinking after every Dose six Spoonfuls of the following Infusion.

Take Filings of Steel, Male Peony Root, of each oz. ij. Valerian Root, and Cassumuniar, of each oz. j. Arum and Zedoary, of each dr. iij. Flowers of Rosemary, Elk's Hoof, and Flowers of the Lilies of the Valley, of each oz. j. Beat all together in a gross Powder; which infuse cold three Days, in old Rhenish-wine, four Pints; and to every Pint, when strain'd, add Tincture of Amber, dr. ij.

Take Tincture of Hiera Picra, oz. iij ss. Steel Wine, dr. iij. Make a Potion, to be taken early in the Morning, every fourth or fifth Day.

Where the Physician is doubtful concerning the true Cause and Origin of the Disease, he may experience both the Methods here laid down by Turns; and, I believe, he will very rarely fail of Success, from one or other of them.

The first Process is particularly calculated to eradicate the Cause of the Disease to which it is directed (and so, indeed, is the last); and, consequently, is fitter to be used in the Intervals, than during the Fits. But the last Method may be seasonably applied, either in or out of the Paroxysm; and is equally applicable, in the Paroxysm, arising from the first supposed Cause, as the last.

When

When the Disease shall appear to be pretty well conquered and subdued, by the Use of the foregoing Medicines, Recourse should then be had to Exercise, (such as riding on Horseback) and *Spaw Water*. And these Things (including a regular Use of the *Non-naturals*) will confirm the Constitution; and, in all Probability, prevent a Relapse.

C H A P. III.

Of the P A L S Y.

THIS Disease claims different Appellations, according to the Variety of Places, or Extent it possesses. Thus it is styled, *Paralysis universalis*; *Paraplegia*, *Hemiplegia*, and the like. Be it observed, I should not enumerate or recite these common, trite Distinctions, (which are already known to every Retainer to the Science) only as they may require to be particularly considered, and spoken to, in the following Discourse.

A *Palsy* (without any Regard to the Place, or Extent it possesses) proceeds immediately from an absolute and total Obstruction of some one or more capital Nerves; which Nerves were subservient and necessary to the Functions of the Part or Parts affected. This is (in fact) the *Causa proxima*, or immediate Cause. But how, or by what Mechanism, this is brought about, is another Question: And 'tis what will require some little Pains, and Subtilty of Reasoning, to resolve clearly and satisfactorily.

When any capital Nerve (or Nerves) is obstructed, so as absolutely to deny Passage to the animal Spirits, it must necessarily be brought about by some one or other of the following Means; viz. either, First, by some internal Stimulus, which contracts it *in se*, as if

it

it was tied with a Ligature: Or, Secondly, by some external Stimulus, which may purse it, (as it were) or contract its Capacity: Or, Thirdly, by the Obstructions, or immoderate Distentions, of some ambient Artery, which runs parallel with it; or some Glands, that lie near or contiguous to it.

Indeed, the first-mention'd Cause (which is not assign'd as such, but imagin'd only) is very hard to be conceiv'd, and allowed of. It is demonstrable, beyond all Contest, that the animal Spirits are subject to Explosions, and preternatural Commotions; and these Disaffections of the animal Spirits may (for a time) suspend or interrupt Sensation, from the Part or Parts dependent on those Nerves, that they occupy under these Circumstances: But then, as these Accidents would soon recede, so the dependent Parts must soon recover their Faculty of Sensation; which does not happen in the Case of a Palsy. Moreover; It is very difficult to conceive, much less to reconcile, that any thing so gross and substantial can be admitted into a Nerve, as is capable of causing so confirm'd, lasting a Contraction and Obstruction. But nevertheless, from what Dr. *Cheyne* says, in his Theory of the Nerves, and nervous Fibres; of their sinking into themselves, (when contracted in their Longitude) and a thousand other chimerical Notions besides; this same Reason (hard as it may be to comprehend or conceive) resumes both fresh Countenance and Courage; and demands, not to be dismiss'd or cashier'd, without further Examination.

To give it then all the fair Play and Force it is capable of: We'll suppose that the Glands, or glandulous Substance, of the *Cerebellum* (in and by which the animal Spirits, and nervous Juice, are elaborated, prepared, and separated from the Blood) are liable to be over-stretch'd, dilated, and immoderately distended (which is a Fate all or most of the other Glands in the animal Body are subject to). This
being

being granted, it will necessarily follow, that the nervous Juice, and animal Spirit, (for I suppose them two Things) may be depraved and vitiated in proportion. And this being likewise allowed me, it will, of equal Necessity, follow, that they will, as well one as the other, be too gross and dense; and, in consequence of this depraved, distemper'd State, they will (more especially the nervous Juice) be liable to preternatural Aggregations, Combinations, or Concretions of their more gross, constituent Parts. And hence (ultimately) such Substances may be formed in the Nerves, as are capable either to obstruct, contract, contort, or convulse them; or, in a word, to affect them in all the various Ways and Shapes that it is possible to conceive or think of.

The Cause next pointed out (which is not barely imagin'd, but assign'd) is some Particles of corrosive, or other noxious Matter; which falling upon, and sticking in the external Coat of a Nerve, may so contract it, by their Stimulus or Irritation, as intirely to shut or close up its Cavity: The Consequence of which will plainly be, a Privation or Suspension of Sensation, from the Parts dependent on it.

Thirdly, As the arterial Vessels accompany the Nerves every-where almost, throughout the whole Body; are contiguous to them, and run parallel with them; thus the immoderate Distension of one of these Arteries may so bear upon and compress its neighbouring Nerve, as to shut it intirely up; and, consequently, deprive all its dependent Parts of Sensation and Motion.

There is yet another, and *fourth* Cause, that pleads its Title, as an Accessory to this Distemper; *viz.* A capital Nerve may be wither'd, or become hard, impervious, intractable, or even callous: The Consequence of which will manifestly be a Palsy of the Part or Parts dependent on it. But, whensoever a Person is seized with a total Palsy, the Nerves are

undoubtedly obstructed, from one or other of the above-mentioned Causes, near their Source, the Brain.

The proper Intentions of Cure (supposing the Disease to arise from the first-mention'd Cause) are these: *viz.* To attenuate, resolve, and digest powerfully: To make proper Evacuations, and strong Revulsion: To foment and comfort, warm and cherish the Nerves: And lastly, to actuate, strengthen and invigorate the animal Spirits. To answer these Purposes,

Let large and sharp Blisters be first applied between the Shoulders, and on the Inside of the Arms; but chiefly upon the very Parts affected. Then,

Take Mustard-seed, the Root of Pellitory of *Spain*, and Arum, of each oz. ij. Gum Styrax, dr. iij. Leaves of Savin, and Feverfew, of each oz. j. Beat all together in a gross Powder; which boil in three Pints of White-wine, to a Consumption of half: Then strain and press the Ingredients very strongly; and to the strain'd Liquor add Nerve-ointment, oz. viij. Evaporate it gently (continually stirring it) till it comes to the Consistence of an Ointment. Of which take oz. iv. Oil of Amber, dr. iij. Camphire, dr. i ss. dissolved in dr. iij. of Tincture of Castor. Mix and make a Liniment; with which let the affected Parts be embrocated, with a warm Hand, every Night and Morning.

Take *Æthiop's* Mineral, dr. vj. Saffron and Arum Root, of each dr. ij. *Russia* Castor, dr. j. Balsam *Peru*, a sufficient Quantity to make a Mass; from which is to be form'd eight Pills out of every Drachm; five of which let the sick Person take every six Hours, drinking after them eight Spoonfuls of the following Infusion.

Take Filings of Steel, and Mustard-seed, of each oz. ij. Roots of black Hellebore, Cassumuniar, and Arum, of each dr. iv. Myrrh, dr. ij. Beat into a gross Powder, which infuse two Days in Four Pints of old Rhenish-wine; then strain and give it.

Take Flowers of Antimony, gr. xij. Euphorbium powder'd, gr. viij. Extract of Black Hellebor, a sufficient Quantity to make twelve Pills: Of which take two going to Bed, every fourth or fifth Night.

Supposing

Supposing the Distemper to result from the second mention'd Cause, proceed as follows; *viz.*

Apply Vesicatories, and use the Liniment, as mentioned above. Then,

Take our Electuary of Quicksilver, (the Method of preparing which is to be found in the End of this Book) dr. iij. for a Dose. To be taken every Night and Morning, drinking after it of a strong Infusion of Mustard-seed.

Take Glass of Antimony, gr. vj. Gum Guaiacum, dr. ss. Extract of Black Hellebore, a sufficient Quantity to make fifteen Pills: Of which take Two or Three every fourth Night, going to Rest.

If the sagacious Physician should judge the Distemper to proceed from the third Cause assign'd; the proper Intentions of Cure, in that Case, will be to correct, or destroy; to dislodge, or expel the peccant Matter; and, at the same time, not to disregard the nervous System, and animal Spirits. And, to execute these Purposes, I recommend as follows.

Proper Applications being premised, such as Blisters, and the Liniment,

Take Antimonial Æthops, dr. vj. Gum Guaiacum, dr. iij. *Russia* Castor, dr. j. Conserve of Scurvy-grass, oz. iij. Make an Electuary, of which the Dose is dr. i ss. three times a-day, drinking after it six Spoonfuls of the Infusion before written. Let the Sick likewise take every fourth or fifth Night, going to Rest, a Dose of the Pills made of Glass of Antimony, &c.

If a Palsy should arise from wither'd, or callous Nerves, which is the fourth and last Cause assign'd; it's much to be fear'd the Disease will scarcely admit of a Cure, if at all capable of it: For, how difficult a Task must it be to resolve such compacted Humours in the Nerves, as have already render'd them hard, intractable, and callous, on the one hand; or open such Obstructions, as have caused them to wither, on the other! However, supposing it possible to give Relief in such Cases, or not; I will nevertheless take it into Consideration, and deliver my Sentiments upon the Matter.

The proper Intentions then, or Indications of Cure, in such Cases, are evidently these: *viz.* To foment, nourish, cherish, warm, relax, and dilate the nervous System: To attenuate, resolve, and remove the compacted Humours, and other obstructing Matter, contain'd in the spongy Cavities of the Nerves: And, lastly, to increase the Spring, Strength and Vigour of the animal Spirits. To this End all hot, sulphurous Waters (especially those of *Bath*, and *Aix la Chapelle*) are very proper and good; whether drank inwardly, or used externally, as a Bath, or by pumping them upon the Parts affected. And further,

Take Gum Storax, dr. ij. Choice Myrrh, scrup. iv. Sagapenum and Castor, of each scrup. ij. Balsam of Gilead, a sufficient Quantity to make forty Pills: Of which let the Sick take five three times a-day, at physical Hours; drinking after them oz. vj. of the following Apozem.

Take the Roots of Sarsaparilla and China, of each oz. j ss. Eringo Root candy'd, and Nutmeg candy'd, of each oz. ij. Roots of Satyrion, Elecampane, and Florentine Orris, of each dr. vj. Coriander-seed, dr. iv. Boil all in a sufficient Quantity of Sack-whey, to three Pints; when strain'd, add Viper-wine, oz. viij. Chalybeat-wine, oz. iv. Mix and give it.

Take Sugar of Roses, dr. iij. Balsam of Tolu, scr. j. Flowers of Benjamin, scr. ss. Oil of Cinamon, one Drop. Oil of Nutmegs and Cloves, of each two Drops. Make a Powder for one Dose. To be taken every Morning and Evening, mixed with half a Pint of Ass's Milk.

Blisters will plead their Use and Efficacy here too; as also the Liniment, above described.

If any Person (from preceding Symptoms) has cause to apprehend an approaching Palsy, the last-mentioned Process, assisted with *German Spaw-water*, Riding, and cold Bathing, or Bathing in the Sea, will, in moral Certainty, prevent its Access.

Glysters, I think, cannot be but of very little Account in the Cure of this Disease; except it be by causing a strong Revulsion from the Brain. And, to
answer

answer that End, they ought to be of a very penetrating, irritating Nature; of which a Model may be drawn from the Chapter of the *Apoplexy*. Strong Errhines, indeed, may be useful; and, in that View, a better thing can scarce be contrived than the *Errhine* of the *Syrian* Herb *Mastich*, &c. to be found in the Chapter aforesaid, p. 9.

C H A P. IV.

Of a LETHARGY.

THIS Disease is sometimes the Consequence of an Apoplexy; sometimes the Effect of a Fever; and at other times comes on of itself, without any apparent Precursor, or Distemper preceding.

When a *Lethargy* succeeds an Apoplexy, (and *Pal-
sies* sometimes do the same) we ought to have especial Regard to the Causes and Nature of the preceding Distemper, in our Attempts to cure this. However, we must not run the Division too far, by recounting every individual Cause (as well the probable and possible, as the real) of that Precursor (for that would lead to Prolixity and Confusion); but only express ourselves generally, concerning the proper Indications and Intentions of Cure, (considering the Disease as the Legacy or Result of that Precursor) and the necessary Medicines to answer them.

The Intentions then, or Indications of Cure, are in general as follow; *viz.* To warm, comfort, and foment the whole nervous System: To rouse, actuate, and invigorate the animal Spirits: To attenuate and resolve all gross, viscid Humours: To warm and stimulate the Blood; and, finally, to promote its due Motion and Circulation. To answer and effectuate

all these Ends, I propose the following Remedies, viz.

Take Antimonial *Æthiops*, dr. vj. Choice Euphorbium, scrup. j. Gum Sagapenum, and fat Myrrh, of each dr. j ss. Balsam of Gilead, a sufficient Quantity to beat into a stiff Mass for ninety Pills, to be gilt; five of which are to be taken three times a-day, drinking after them oz. iv. of the following Infusion:

Take the Root of Pellitory of *Spain*, and Satyrion, of each oz. j. Elecampane, Florentine Orris, Zedoary, and Ginger, of each oz. ss. Hermodactyls, and Mecoacana, of each dr. ij. Infuse all warm, the Space of a Night, in two Pints and half of White-wine; then strain, and to every Pint add Viper-wine, oz. iv. Tincture of Metals, dr. i ss. Mix ready for Use.

Take Glass of Antimony, gr. x. Strain'd Gum Ammoniac, dr. j. Mix and make thirty Pills; three or four of which let the sick Person take, according to their Operation, every fourth or fifth Night.

If it shall appear to the sagacious Physician, that the Distemper in question is the Issue of a Fever; in that Case, the Dissolution, Fluxion, and Discharge of the febril Recrements, must be promoted. To this End, a Salivation (brought about by the Internals commonly used and practised upon those Occasions) may suffice. However, lest any Physician should be in Doubt, or unacquainted in these Particulars; I will describe such a Method, as will be proper, and (I doubt not) successful.

Take Mercurius Dulcis prepar'd, and Gum Guaiacum, of each dr. iiij. Venice-treacle, a sufficient Quantity to make sixty Pills: Five of which are to be taken every Morning, and every other Night: And the intermediate Night let the following Bolus be taken:

Take our Electuary of Quicksilver, dr. iv. for one Dose; to be taken as before-mentioned.

To these are to be premised the Use of Baths, Glysters, and gentle Purges; that as well the external Pores of the Skin, and the *Primæ Viæ*, as the Glands of the Intestines, may be brought into a proper Disposition.

This Process, indeed, differs somewhat from those commonly practis'd to raise a Salivation; and, I believe,

lieve, it will be found to excel them in Proportion, as applied upon this Occasion.

When this Disease appears to be spontaneous, and to come on of itself; or (to speak more properly) had no Precursor, or preceding Distemper, to which its Birth may reasonably be ascribed; we must then consider it in another Light, and vary its Methods of Cure accordingly.

When the Disease in question is spontaneous, or comes on of itself, and advances slowly and gradually; the Person or Persons so affected, are more properly said to be lethargic, than to have a Lethargy. In such a Case, the immediate Causes are manifestly a gross, heavy, viscid, and spiritless State of Blood: And it is very easy to conceive and explain, that such a Habit of Blood may, very probably, render a Person lethargic. For, let us suppose only, that the Systole, or Contraction of the Heart, is in its due Times and Quantities, and that the Blood is propell'd out of it accordingly; 'tis easy to discern, that the Blood (under such a State) cannot move and circulate with the Velocity required. Indeed, its Motion, or Velocity, whilst in the larger Vessels, may suffer no very sensible Diminution; but when it reaches those of the third or fourth Division, and especially the most remote, evanescent Arteries, it will there be greatly impeded. What will be the Consequence of this? Why, the arterial Vessels (except they enjoy a very strong Spring, or elastic Force) will yield to the incumbent Pressure, and become distended beyond their natural and due Dimensions. The last Result then, is this; The Arteries being unduly distended, will depress and bear too hard upon the Nerves, and so finally obstruct the Motions of the animal Spirits: And thus the whole animal Frame necessarily becomes dull, heavy, sleepy, and unactive. But if these Effects happen to tend, and terminate more particularly towards the Head, and to the Brain, the Seat and

Source of the animal Spirits; they may so incumber and depress the capital Nerves, as to render the whole Body truly lethargic, or produce a total Lethargy.

Such being the State of the Case, the proper Intentions of Cure are to thin, rarefy, and subtilize the Blood; and, by all imaginable Means, to convey Warmth, Spirit and Vigour to the whole System, or animal Fabric. To these Ends and Purposes the following Medicines are recommended.

Take Filings of Steel very finely levigated, oz. j. Powder of Arum-root, dr. iv. The Species with Three Peppers. Choice Myrrh and Sagapenum, of each dr. ij. Russia Castor and *Ens Veneris*, of each scrup. iv. Extract of Saffron, dr. ij. Balm of Gilead, a sufficient Quantity to make a Mass: From every Drachm of which are to be made seven Pills. Five are to be taken three times a-day, drinking after oz. iij. of the following Liquor.

Take Juice of Garden Scurvygrafs, two Pints; Juice of Seville Oranges, half a Pint: Mix and filter; and to every clear Pint add Compound Biony-water, oz. ij. Tincture of Amber, dr. j ss. Volatile Salt of Hartshorn, dr. ss. Mix for Use.

Take Glass of Antimony, gr. j. Extract of Black Hellebore, gr. x. Make two Pills: to be taken going to Bed, every fifth or sixth Night, either increasing or diminishing the Dose, according to its Operation.

It will easily be imagined, (I promise myself) that my View (in ordering the Glass of Antimony in this Case, as well as in some others) is to shake the Constitution, and make a strong Revulsion now and then, whilst we are endeavouring to correct, alter, and destroy the Texture and Cohesion of the morbid Humours by other Medicines.

The mediate and immediate, or second and last Cause of this Disease (taken in a general Sense) have already been sufficiently explain'd. But I have not, as yet, sought out for the antecedent, or most remote Causes; considering it as spontaneous, and independent of any Precursor. And these (as I take it) consist chiefly in an excessive Use of Venery; an Abuse
of

of the Non-naturals in general, Gluttony, and Intemperance: And lastly, receding too suddenly from a Life of Exercise and Activity, to the opposite Extreme of Sloth, Indolence, and Supineness.

When by the Use of the above Methods a Cure is perfected, or considerably advanc'd, Recourse may then be had to Riding and *Spaw* Water; which will either complete the Cure, or prevent a Relapse.

C H A P. V.

Of CONVULSIONS.

THIS Disease (though indeed all Ages, Sexes, Complexions, and Constitutions, are more or less liable to it) is particularly incident to young Children; of which it sweeps away great Numbers, as our Weekly Bills can testify. There are likewise some amongst the Fair Sex (of soft Nerves, and delicate Frames) who are extremely incident to this Evil: But here (in common Speech at least) it obtains the Name of *Hysteric Convulsions*.

This Disease is commonly judged to be strictly and absolutely nervous; and consequently the Blood seems to be exempt from all Reproach and Calumny upon that Account.

I have observ'd and remark'd the Practice of many learned and famed Gentlemen of the Faculty, in Cases of this Nature: Which sufficiently convinces me, that their respective Opinions of the Disease were agreeable to what I say. I have seen frequent Instances, where they have treated Persons under this Disorder, Month after Month, without straying a Tittle out of the Road of cephalic and nervous Medicines; though they long experienced them, to little
or

or no Effect. And this I think is sufficient to prove that they had not the Judgment or good Luck to seek for any other Cause.

That Convulsions are sometimes in their Nature and Essence purely nervous, I believe indeed (as for Example, where they occur to hysterical Women); and that they appeal to no other Cause whatever. But, generally speaking however, I apprehend that those preternatural, inordinate Explosions, (which are the very Expressions and Characteristics of the Disease in question) claim ill Humours in the Habit as a *Substratum*.

This is incontestably the State of the Case in convuls'd Children. In these the Convulsions are sometimes confined to the Bowels; when they evidently arise from Wind, and sharp Humours in the Guts; as is evident from the green, slimy Stools they void, and Wind they discharge at such Times: And we ought not to wonder, that Wind and sharp Humours, distending and irritating the tender Fibres of the Bowels in Infants and Children, should produce this Effect. When the like ill Humours are form'd in the Blood, and are thrown critically upon the nervous System in general, or the Brain in particular; they will very necessarily affect the whole Frame of the animal Machine, in the same manner: But tho' Children are abundantly more subject to this Disease than Adults; we are not therefore to infer, that they labour under worse Habits of Body than grown People. This would be bringing a very severe, and perhaps a very unjust Charge against their Parents: Whereas, if we only consider the disproportionate Tendernefs of the Nerves, and animal Spirits in Children; and withal, how very weak the Faculties of Digestion and Concoction are in them, we shall easily comprehend how liable they are to the Generation of crude, sharp Humours, as well in the Blood as the Bowels. And thence we may infer, *à priore*, how
liable

liable they are, and must be, to fall into these unhappy and fatal Disorders.

Thus I suppose that in the tender Bodies of Infants, the Intromission of crude, unconcocted Matter (and even such as will result from their Food, not duly elaborated and concocted in the first Passages, or alimentary Duct) are sufficient to excite Convulsions. But in Persons of riper Years, whose Bodies and animal Powers are much more robust and strong; these same Effects may reasonably challenge some more remote and weighty Cause.

I shall not undertake to determine on the particular Genus or Figure of the morbid Humours that produce this Disease in adult Persons; because they lie so remote from our outward Senses or Sight, that we can go no further than Guess or Conjecture concerning them: But thus much I will venture to say, *viz.* That whenever a certain, necessary Quantity of ill Humours are formed in the Blood, or rather accumulated (whether the supposed Humours are, in their Nature, acid or alkaline, sharp or sour, acrid or corrosive); provided the same are critically determined, or thrown (if I may use that Expression) upon the Nerves and Membranes; and especially, if near their Source and Origin, the Brain; they will very probably produce the Disease in question.

I have seen several Instances of Persons, who have been violently convulsed, upon excessive drinking of ardent, spirituous Liquors, especially when the Debauch has been of Brandy-Punch.

Now, I take it for granted, or rather, lay it down as undeniable Matter of Fact, That, when any Person commits a Debauch, (that is, gets drunk) he had drank more than his Stomach was able to digest and concoct. And in that Case, the Surplus of hot, fiery, vinous, or other Particles, passing in their natural State and Apparel through the Lacteals into the Blood, will necessarily (as it evidently does) irritate
and

and vellicate the whole animal Frame, and more especially the nervous System. Hence it follows, that the Nerves will be put into violent Contortions; and the animal Spirits into violent Commotions or Explosions: Whence result Spasms, Convulsions, &c.

The same Disease happening to hysterical Women, claims a very different Origin. Here it results (generally speaking at least) from preternatural Commotions and Disorders in the animal Spirits themselves, (not from an extrinsic, but an intrinsic Cause) which are at last wrought up into convulsive Explosions.

Having thus explain'd the Essence of convulsive Disorders, and assign'd the most common, if not the only Causes of them; I now proceed to consider the proper Intentions of Cure, and to point out the necessary Methods to execute the same. — And First, I shall consider the Disease, as it affects Infants or Children.

When an Infant or Child is seized with Convulsions in the Bowels, the Indications of Cure are plainly these; *viz.* To apply such Things inwardly as warm, and comfort the Stomach and Guts; join'd with such Medicines as expel Wind, and obtund or sheath the Points of sharp, irritating Humours. To answer these Purposes, I advise as follows; *viz.*

Take Saffron in Powder: Rhubarb and Crabs Eyes prepar'd, of each dr. ss. White Sugar Candy, dr. j. Oil of Aniseeds, drops v. Mix and make a Powder, to be divided into six Papers; one of which to be taken every three Hours in a Spoonful of the following Mixture.

Take Elixir of Health, Oil of sweet Almonds, and Penny-royal Water, of each oz. j. The Yolk of a fresh Egg; Liquid Laudanum, six Drops. Mix——

Take the Carminative Decoction, oz. iij. Linseed Oil, oz. ss. Sal Gem. dr. ss. Oil of Juniper, drops xx. Make a Glyster, to be given directly, and to be repeated every Night and Morning, as Occasion shall require.

Take

Take Mithridate, dr. iv. Oil of Mace expressed, dr. ij. Mix and make a Plaister, to be applied at the Region of the Stomach or Navel.

The Physician (in Practice) may depend on good Success from the above Medicines: Therefore I advise the Continuance of them, till a Cure is obtained.

When Infants and Children are affected with a total Convulsion, the curative Intentions are, First, Copious Evacuation, and Derivation. 2^{dly}, To obtund and sheath; and 3^{dly}, To correct and discharge the morbid Humours. To answer these Ends, I advise as follows; viz. First draw Blood from the Foot or Arm, oz. iij.—Then

Take the Emollient Decoction, oz. iv. Linseed Oil, dr. iij. dissolv'd in the Yolk of an Egg: Sal Gem. scr. j. Make a Glyster to be given every Night and Morning.

A Semicupium may be used every Night and Morning, to derive the Blood from the superior Parts to the inferior.

Apply Vesicatories between the Shoulders and the Inside of the Arms.

Take Æthiops mineral, dr. j. Diaphoretic Antimony, and *Poterius's* Antihectic, of each dr. ss. Rhubarb, scr. j. Make a Powder, to be divided into six Papers, one of which to be given every three Hours, with a Spoonful of the following Mixture.

Take Rue-water and cold-draw'd Linseed-oil, of each oz. j ss. Syrup of Elder, oz. j. The Yolk of a fresh Egg: Tincture of Castor and Amber, of each scr. j. Mix for the afore-mention'd Use.

Take native Cinnabar, scr. ij. *Poterius's* Antihectic, and white Amber prepar'd, of each scr. j. Contrayerva Root and *Russia* Castor, of each gr. viij. White Sugar Candy, scr. j. Mix in a Powder, to be divided into eight Papers; one of which is to be given every three Hours in a Spoonful of the Mixture before-written.

Take Colts-foot and true Maiden-hair, of each half a Handful: of each of the five opening Roots, dr. iij. Root of Male Peony and Valerian, of each dr. ij. Boil in a sufficient Quantity

tity of Black cherry-water to oz. xij. when strained; in which dissolve Manna, oz. j. to be used for common Drink. To continue the Use of these Prescriptions for thirty Days.

When this Disease happens to Adults, or Persons advanc'd to a mature Age, the Intentions of Cure will then be pretty much the same (indeed) with those last described: But the Medicines to answer those Intentions, will require some Variation, especially with regard to Internals; for, Bleeding, Blisters, Glysters, and Use of a Semicupium, will be equally proper and necessary to these, as to Children: But for the rest, I recommend the following:

Take antimonial *Æthiops*, dr. vj. *Poterius's* Antihectic, dr. iv. Rhubarb. dr. ij. Contrayerva Root and *Ruff.* Castor of each dr. j. Rob of Elder, oz. iij. Syrup of Marshmallows a sufficient Quantity, to make an Electuary, the Dose of which is dr. ij. to be taken three times a Day; drinking after it half a Pint of the following Apozem, made warm.

Take *Spanish* Scorzonera Root, Sarsaparilla, and knotty China, of each oz. ij. Of the five opening Roots, of each oz. j. Male Peony, and Valerian, of each dr. iv. Let them be boiled in a sufficient Quantity of Fountain Water, to four Pints strained; to which add Syrup of Elder, oz. iv. and mix it.

All warm, sulphureous Waters (such as those of *Bath*, or *Aix-la-Chapelle*) would be of great Benefit here, either drank, or used outwardly as a Bath.

The internal Remedies above describ'd, are not only proper to be used during the Fit, and in the Intervals of such Fits as return at short Periods, or Distances of Times; but should be continued for the Space of two or three Months successively, that the most latent and remote Seeds of the Disease may be intirely eradicated: And when that Point is once gained, the Use of *German Spaw* Water, Riding, and Cold-bathing (supposing, at the same time a regular Method of living) will effectually prevent the Regeneration of new morbid Matter.

Such

Such Convulsions as attack hysterical Women, and are rather symptomatical than essential, are to be treated after a Manner very different to any of the foregoing: Here, the Indications of Cure are to warm, comfort, and strengthen the nervous System, and animal Spirits: To regulate, and restore the natural Motions and Operations of the latter, and to suppress their inordinate Commotions. To answer these Purposes, the following are recommended.

Take Powder against an Epilepsy, dr. ij. Human Scull prepared, True Sagapenum, of each dr. j. *Russia* Castor, and Assafoetida, of each dr. fs. Extract of Rue, a sufficient Quantity, or dr. j fs. Balsam of *Pernu*, q. s. to make 80 Pills; five of which are to be taken three times a Day, drinking after a Spoonful of the following Julep:

Take Black-cherry and Rue-waters, of each oz. vj. Compound Briony-water, oz. iij. Syrup of Stœchas, or *French* Lavender, oz. j. Tincture of Amber, dr. ij. Compound Spirits of Lavender, dr. ij. Mix.

During the Time of taking the above Medicines, and for some Months after; the Patient should drink *Bristol* Water, or rather *Spaw* Water, (if her Constitution will bear it) for her common Drink.

Riverius is of Opinion, that a total Convulsion always proceeds from Repletion, and Inanition: But was he alive, and called upon to defend his Sentiment; I fancy he would not be able to produce Arguments sufficient to make it appear valid.



C H A P. VI.

Of TREMBLINGS on the NERVES.

THE Causes of this Disorder are very various ; but, I apprehend, it most commonly proceeds from Errors or Defects, in the Use of some one or other of the Non-naturals.

Sometimes it results from a violent Fright or Surprise ; and, so often as it has proceeded from that Cause, I have found it very stubborn and lasting, against the Force and Power of the best-concerted Medicines. Sometimes it is brought on by the immoderate Use of Coffee ; at others, from that of Bohea Tea ; both which are at present very much in Fashion amongst us : But, Excess in drinking of ardent, spirituous Liquors, is by far the most frequent Cause of all. Sometimes, doubtless, the Cause is engender'd in a Person's Blood ; and at others, may exist in the animal Spirits. Sometimes this Disorder is the Legacy of a slow, lingering Fever (of the malignant Sort) ; and at others may proceed from Intemperance, in eating of such Foods as are perhaps ill adapted to the Constitution. Since then this Disease may proceed from so many different Causes, how precarious and uncertain must all Attempts of Cure prove, in case the Physician does not nicely discriminate and distinguish from what particular Origin it springs !

If Tremblings are judged and concluded to arise from a Fright or Surprise, the curative Indications are, to strengthen, comfort, warm, and invigorate the nervous System, and the animal Spirits : To answer which Purposes, I direct as follows, *viz.*

Take Filings of Iron finely levigated, dr. vj. Species of Diambre without Perfumes, dr. iij. Gum Syrax, tat Myrrh, and Balsam of Tolon, of each dr. j ss. *Rosin* Castor, dr. j. Beat all together

to a fine Powder; to which add, Candied Nutmeg, oz. iij. Syrup of the same, q. s. to make an Electuary, whose Dose is dr. iij. to be taken every Morning, fasting; and at four o'Clock in the Afternoon; drinking after it six Ounces of the following Apozem:

Take Eryngo Root candied, oz. ij. Roots of Sarsaparilla and China, of each oz. j ss. Angelica and Satyrion, of each dr. iv. Coriander-seeds, oz. ss. Let them be boiled gently in a sufficient Quantity of Spring-water, to three Pints, when strained; to which add, Viper-wine, half a Pint. Mix and give it.

Continue the Use of these Prescriptions for 60 Days, or 100, if Need requires. To these add the Use of *Spaw* Waters, Riding, as well as Immersion in cold Water.

If the Disease in question proceeds from Errors or Abuses in the Non-naturals; the particular Errors are first of all to be corrected. 2^{dly}, The noxious, irritating Humours are to be diluted, and washed off, by drinking, and bathing in some warm, sulphureous Water; especially one or other of those heretofore recommended, p. 30. Lastly, the nervous System, and animal Spirits are to be warm'd, comforted, strengthened, and invigorated: In which Views I recommend as follows, *viz.*

Take Filings of Iron finely levigated, dr. v. Species of Diambre, without Perfumes, dr. iij. Fat Myrrh, and Balsam of *Tolu*, of each dr. j ss. Fine Rhubarb, dr. ij. Extract of Rue, dr. j ss. Balm of Gilead, q. s. to make six Pills of every Dram of the Mass; five of which let the Sick take twice a Day; drinking after them half a Pint of *Spaw* Water.

Take best Saffron, Species of Hyacinth, of each scr. j. Volatile Salt of Vipers, scr. ss. Confection of Alkermes, q. s. to make a Bolus, to be taken every Night, going to Bed.

If the Disorder succeeds a slow, lingering, malignant Fever; it is (in that Case) evident next to Demonstration, that Nature was not strong enough to discharge or expel all the *Sordes* and excrementitious

Dregs of the Disease: Consequently, that these have lodg'd themselves upon the Nerves and Membranes; where by their Stimulus they excite incessant Tremors.

Hot, sulphureous Waters (being drank and used Bath-wise) will very probably effectuate a Cure here: But, in case those should fall short, I advise the following; *viz.*

Take our Electuary of Quicksilver, dr. iij. or iv. for one Dose, to be taken every Night.

Take Gereon's Decoction of Sena, oz. iv. *Calabrian* Manna, oz. j. Glauber's Salt, dr. iij. Make a Potion to be taken early in the Morning, every fourth or fifth Day.

But, supposing this Disorder, and its proper Causes to be engender'd in the Blood, without any Fever, or other Disease preceding; it will (in such Case) yield to the Remedies immediately foregoing.

Coffee, and Bohea Tea, though each, in its Turn, productive of this Distemper; yet are they, of Natures and Qualities, diametrically opposite to each other. For Example: Coffee is extremely hot and dry, and is supposed to cause a Trembling of the Nerves, by means of a caustic Oil it abounds with: Bohea Tea (on the contrary) is very soft and moist, and causes Tremblings, by over-weakening and relaxing the Nerves; in Consequence of which, they lose their due Tensity or Elasticity.

Therefore, whenever Tremblings are superinduced by the immoderate Use of Coffee, Bohea Tea should seem a proper Corrective or Cure; and so *vice versâ*: But however, we shall not confine our Views here, lest the Cause should only be altered, or chang'd from one to the other, and the Effect or Disorder still remain the same. And First, The Error is to be corrected; that is, the Use of Coffee or Bohea Tea (whichsoever is culpable) is to be moderated, or rather intirely left off.

If Coffee is the Cause of this Disorder ; then drinking hot, sulphureous Waters, will be a Cure: But, if Bohea Tea stands charged as the Author of it ; then the *German Spaw* Water, and riding on Horseback, will equal, and perhaps excel, any other Means whatever.

The Use and Efficacy of these Things will be sufficiently justified, and manifested *à priori*, if we only consider, that when the Disorder in question is brought on by the immoderate Use of Coffee ; the Indications of Cure (in that Case) are to moisten, dilute, and wash away the hot, irritating, caustic Particles : whereas, when they result from the Use of Bohea Tea, the Intentions are plainly these, *viz.* to warm and invigorate the Blood and animal Spirits, and to brace and strengthen the Nerves : But, for fear these Things should stand in need of any Assistance from the Galenical or Chymical Regions ; we further propose, as follows, *viz.*

Take Milk of Sulphur, and Sperma Ceti, of each dr. v. Rob of Elder, oz. iij. Syrup of the same q. s. to make an Electuary, dr. ij. for a Dose to be taken every six Hours; drinking after it half a Pint of the following Apozem :

Take of each of the five opening Roots, oz. j. Leaves of Colts-foot, two Handfuls; boil in q. s. of Spring-water, to four Pints, when strained, in which dissolve Manna, oz. iv. Sal Prunel. dr. iv. Mix.

This is to rectify the Effects of Coffee.

Take Filings of Iron prepar'd; Species of Diambre without Perfumes, of each dr. v. Rhubarb and vitriolated Tartar, of each dr. iij. Vitriol of Steel, dr. j. Candied Ginger, oz. iij. Syrup of the same, q. s. to make an Electuary: Dose dr. ij. three times a Day.

To relieve Tremblings, from Bohea Tea.

C H A P. VII.

Of the Cephalalgia, or HEAD-ACH.

THIS is a Disease that afflicts (more or less) great Numbers of People. In some it is accidental and momentary; in others, habitual and permanent. When it is accidental, its Causes consist, either, *First*, In catching Cold: Or, *Secondly*, In a gross, heavy Air: Or, *Thirdly*, In voracious Eating, or Intemperance in drinking of ardent, spirituous Liquors. And when it proceeds from Gluttony, or Intemperance in Drinking, their Opposites are a Cure. Sometimes it results from a foul Stomach: At others, it is truly nervous; as is especially the Case, when it affects hysterical Women. But nevertheless, I apprehend the most common Cause of this Disease (especially where it is habitual) to be a Constipation, or Stoppage, of the excretory Pores of the Skin.

It is most certain, when the excretory Pores are stopp'd, or their Orifices contracted in any Proportion, the Secretions that ought to be perform'd by them will be suspended, or lessen'd accordingly. The first and most immediate Consequence of this, is Repletion. To that succeeds an extraordinary Pressure of the Blood and Humours, upon all the Superficies of the Body. And if the Blood-vessels of the Head, and the Brain, happen to yield or give way first and most, or even the Glands that lie contiguous to them; the Effect will, undoubtedly, be a *Cephalalgia*, or Head-ach, at least.

That the *Head-ach* frequently proceeds from a foul Stomach, is likewise certain: But, whether the Conjectures commonly form'd about it are right and true, or not, I shall leave to the Reader. It is commonly imagin'd, that indigested Fumes fly from the Stomach

up

up to the Brain, and so cause the Head-ach. I allow, indeed, that foul, gross Humours, pressing upon the Nerves and the Meninges; or sharp, corrosive Humours, irritating the same, may very probably excite Pains in the Head: But I cannot allow, that crude, undigested Humours, have so swift a Transition to the Head; or, at least, that their Fumes fly up thither, and cause the Complaint in question.

That a gross, heavy Air, very often causes the Head-ach, is beyond all Dispute: And the Reason of this is (I think) very plain; for such a State of the Air must necessarily weaken the Spring and Elasticity of the Solids, and in equal Proportion will affect the Motion of the Fluids. These Things being allow'd, (which is certainly the Case) the arterial Vessels, and Glands of the Brain, yielding to the increas'd *Momentum*, and Pressure of the Blood upon them, and thence distending immoderately, must necessarily give a Person a Pain in the Head, if no worse Evil happens.

But hitherto I have been a little too superficial in my Explanation of this Phænomenon, which I shall endeavour to render yet more plain. Suppose only the attractive Force of the Heart to continue in full Vigour, (which is certainly the last Muscle of the Body that will suffer in the above-mention'd Sense) and that the other Solids, as well as Fluids, become obtuse, lazy, and unactive; we must necessarily suppose, the Blood, for want of a free and easy Circulation, will press with an extraordinary Force somewhere: And if this happens more particularly in the Head or Brain than other Parts, it will certainly produce a Head-ach.

Sometimes this Disorder proceeds from Indigestion; and, at others, from want of Concoction. Supposing it an Effect of the first-nam'd Cause, it is very easily accounted for. Indigestion is another Word to express Immaturity or Crudity; and Crudity always ingenders Wind: Now Wind, wheresoever situated

and confined, (whether it be in the Intestines, or the Blood-vessels) always distends the Part or Parts it is contain'd in; whence the Blood may be violently press'd upon the Head, and consequently that Part be subjected to Pain.

When Want of Concoction asserts itself the Cause, 'tis plain (in that Case) that the Disorder arises from Irritation, caused by the unconcocted Humours circulating through the fine Arteries of the Brain. But when none of the mention'd Causes appear, or can reasonably be appeal'd to, the Disease (then) is plainly nervous, and requires to be considered and treated in a quite different Light. A *Cephalalgia*, or Head-ach, may be nervous (indeed) in a twofold Sense; *viz.* *First*, The Nerves may be too lax, weak, and flaccid; and, consequently, may be too much inflated and distended by the animal Spirits: Or, *Secondly*, The Nerves may be too much inflated and distended by an inordinate, preternatural Fluxion, or Explosion of the same; as is usually the Case in hysterical Women.

We might run the Division a good deal further, indeed: But, as these are the most common, and most probable Causes; so, for Brevity's sake, I shall confine myself to the Consideration of them only.

I have already observed, that if this Disease proceeds from Gluttony, or intemperate Drinking, (which, God knows, is too often the Case) their Opposites will be a Cure; provided the Blood is not yet contaminated by them.

If it comes upon a Cold, copious Evacuations, (especially by Bleeding) and the following Sudorifics, will seldom fail of Success.

Take Virginian Snake-root in Powder, and *Gascoign's* Powder, of each gr. xv. Russia Castor, gr. vj. Venice Treacle, scrup. ij. Make a Bolus, with q. s. Syrup of Marshmallows. To be taken at Night going to Rest, with the following Draught:

Take distill'd Water of the blessed Thistle, [*Carduus*] oz. iij. volatile Salt of Hartshorn, gr. viij. Syrup of Elder, oz. j. Make a Draught.

Draught. Let the Bolus and Draught be repeated every Night, as long as there shall be need.

It would be convenient, that the Patient drinks two or three good Draughts of some warm, diluting Liquor (such as Sack-whey, or Pectoral-drink) each Night, beginning about an Hour after taking the Medicines. But if the Complaint should elude the Force of those Medicines, and continue obstinate, intermit the above, every fourth Night, and give the following:

Take Calomel prepar'd, and Medicinal Antimony, of each gr. x. Gum Guaiacum, scrup. j. *Venice Treacle*, q. s. to make a Bolus. To be taken at Night going to Rest, and the next Morning the following Potion:

Take Elixir of Health, and Tincture of Hiera Picra, of each oz. j ss. Tincture of Jalap, dr. j. Mix.

If the Disorder results from a gross, foggy Air, the following Electuary, and Riding, or any other brisk Exercise, will answer the End.

Take Flowers of Sulphur, dr. vj. Powder of Elecampane, dr. ij. Rhubarb and Cubebs powder'd, of each dr. j. candy'd Ginger, oz. ij. Syrup of the same, q. s. to make an Electuary: Of which take the Quantity of a Nutmeg, three times a Day.

If it appears to be the Offspring of a foul Stomach, I advise the following:

Take Powder of Ipecacuana, scrup. j. Emetic Tartar, gr. iij. Conserve of Hips, q. s. to make a Bolus. To be taken in the Evening, drinking plentifully of the Infusion of Carduus between vomiting.

Take Tincture of Hiera Picra, oz. iij ss. Chalybeat Wine, dr. iij. Make a Potion: To be taken every Morning for three times.

If Indigestion stands charg'd as the Author of this Disorder, the Method last describ'd may do. But if this Cause should be so stubborn and radicated,

as to deny Obedience to those; the following Electuary being added, must (I think) infallibly succeed:

Take Filings of Iron, dr. vj. Species of Diambre, without Perfumes, and choice Rhubarb, of each dr. j ss. Extract of Centaury, dr. ij. Syrup of Mint, q. s. to make eighty Pills; of which let the Sick take five, twice a Day.

The above Electuary will do the Business, supposing Errors of Concoction to be culpable; especially if assisted with the following:

Take Virginian Snake-root, and Angelica-root, of each dr. iij. Elecampane, and Florentine Orris, of each dr. ij. Boil them in a sufficient Quantity of White-wine, to oz. xij. when strain'd; to which add Salt of Wormwood, dr. ij. dissolved in two Ounces of Lemon-juice. Mix. A fourth Part of which is to be taken every Night going to Rest.

If lax or weak Nerves are in Fault,

Take Peruvian Bark in fine Powder, oz. j ss. Mynsicht's Tincture of Steel, dr. vj. Rub them very well in a Mortar, till it comes to a blackish Powder; then add candy'd Nutmeg, oz. ij. Syrup of the same, q. s. to make a soft Electuary. The Dose, dr. iij. to be taken thrice a Day.

If this Disease flows from preternatural Agitations, and Explofions of the animal Spirits, it is then purely hysterical. But as it is rather a symptomatical, than essential Complaint; so it ought to be considered in the Cure of the Disease to which it appertains.

But here I can't omit to recognize one Medicine, by which I have very happily succeeded in the Cure of some very obstinate, radicated Head-achs. It is this:

Take Pil-cochia the less, scrup. ij. Calomel prepar'd, gr. xii. Russia Castor, gr. x. Euphorbium, gr. j ss. Oil of Rosemary, gutt. vj. Beat them into a Mass for eight Pills, to be gilt; three of which are to be taken at Night going to Bed, and the rest the following Morning; and the Dose to be repeated every third Day, either increasing or diminishing the Dose, according to its Operation.

N. B. When

N.B. When I have prescrib'd those Pills, it has always been upon a Supposition that the Head was stuff'd, or loaded with tough, pituitous Humours.

When once a Cure is effected, (from whichever of the various Causes above-mention'd the Disease might have sprung) *Spaw* Water will be of great Use to prevent its returning.

This unbounded Assertion, in favour of *Spaw* Water, will perhaps seem to some very strange and presumptuous: But, nevertheless, it is very orthodox and true; as, I fancy, I can demonstrate, in a very plain, familiar manner. *Ex. gr.*

Suppose the Disease in question to proceed from Gluttony, or Intemperance in drinking of ardent, spirituous Liquors; *Spaw* Water will soon correct and carry off, or conquer and subdue the ill Effects. And moreover, by a constant and regular Use of this Water, every Person will (*cæteris paribus*) be better qualified and enabled to practise those Things, than he would be otherwise. But this is encouraging bad Practices.

If the Complaint results from taking Cold, I don't (indeed) recommend *Spaw* Water as a Cure, but as a Preventative. And, *Principiis obsta*, and *Venienti occurrere Morbo*, are very ancient, salutary, and valuable Precepts. And there is nothing in Nature, perhaps, that will more effectually harden a Constitution, and defend it against the Access of Cold, (as well as other Injuries) than a constant and regular Use of this Water; cold Bathing, only, excepted. Furthermore, the Use of *Spaw* Water is an excellent Barrier against the ill Effects of gross, heavy Air: And its Benefits, as applied to correct and mend Errors or Defects of Digestion and Concoction, are universally allow'd and acknowledg'd.

Lastly, *Spaw* Water is remarkably good for restoring lax and weak Nerves, and to strengthen and regulate the Motions of the animal Spirits. But,
for

for a further Account of the Virtues of this admirable Water, and for a further Proof of what I have here said of it, I must refer my Reader to a Piece lately publish'd, intituled, *An Inquiry into the Natures and Properties of the Spaw Waters, &c. with a mechanical Explanation of their Virtues and Uses, &c.* By Charles Perry, M. D. and printed for Mess. Knapton, Book-sellers, at the Crown, in Ludgate Street, London.

C H A P. VIII.

Of a GIDDINESS in the HEAD.

Sometimes this Disorder is seated, or has its Foundation in the Blood (strictly speaking): When so, its Cause (most commonly) consists in Repletion, or a Superfluity of Blood. Sometimes (indeed) it proceeds from an inordinate Ferment or Rarefaction of that Fluid: At others (again) it is purely nervous, and results from a Hurry, or confused Motion, of the animal Spirits. It may likewise proceed from too lax and weak a Condition of the capital Nerves; or, on the contrary, from too great a Tensity or Stricture of them.

It must depend on the judicious and expert Physician, to discriminate betwixt those various Causes; and to determine with himself, from which of them the Disorder, which presents, may arise.

If it comes from Repletion, Evacuation is plainly the Indication of Cure; and, in that Case, Bleeding once or twice, (especially in the Foot) with the Assistance of convenient purging Medicines, seldom fails to give Relief. The best Cathartics to be used in that Case, are such as work briskly; viz.

Take Gereon's Decoction of Sena, oz. iv. Manna of Calabria, oz. j.
Glauber's Salt, dr. vj. Compound Aniseed-water, dr. iij. Mix
for

for a Potion, to be taken early in the Morning, and to be repeated every third Day.

But, if the Complaint is violent and obstinate, we must add to Bleeding and Purging, all Means of Derivation and Revulsion. In this View, I advise the Semicupium, or Bathing the lower Parts of the Body in warm Water and Milk: Glysters that are both stimulating and emollient, and Blisters to the Neck or Arms.

If a preternatural, inordinate Ferment and Rarefaction of the Blood lays Claim to it; in that Case all cooling, condensing Medicines, joined with Cathartics of the same Tendency, will avail much. To answer these Purposes;

Take Crystals of Tartar, oz. j. Sal Prunel. dr. iv. Rob of Juniper, and Pulp of Cassia, of each dr. xij. Syrup of the five opening Roots, q. s. to make an Electuary, to take the Quantity of a Chesnut, thrice a Day; drinking after it six Spoonfuls of the following Apozem:

Take Decoction of Tamarinds, (with oz. ss. of each of the five opening Roots boil'd in it) a Pint; to which add of the bitter purging Salts, dr. xij. Manna, oz. ij. Simple Spirits of Scurvy-grass, dr. iij. Mix and give it.

When this Disease is derived from a nervous Origin, or rather proceeds from Disaffections of the animal Spirits; in such Case the following are to be preferred:

Take Powder against an Epilepsy, dr. iij. Powder of the Root Cassumaniar, and Russia Castor, of each dr. j. Gum Sagapenum, scr. iv. Assafetida, scr. ij. Balm of Gilead, q. s. beat well into a Mass for 80 Pills; five of which are to be taken every sixth Hour; drinking after them a Draught of Tea, made from the following Ingredients:

Take the Root of Male Peony cut very small, oz. j. Lily of the Valley, Rosemary, and Lavender-flowers, of each oz. ss. Mix.

If a too lax and weak Condition of the Nerves is
in

in Fault; I recommend the Electuary, directed for a *Cephalalgia* proceeding from the same Cause, of the *Peruv. Bark*, &c. p. 40. and the Use of *Spaw Water*.

But if the Complaint springs from too rigid and tense a State of the Nerves; in that Case I recommend the Drinking of hot, sulphureous Waters; or (for want of them) the following Electuary:

Take Milk of Sulphur, and Sperma Ceti, of each dr. vj. Conserve of Mallow-flowers, and Pulp of Cassia, of each oz. ij. Syrup of Marshmallows, q. s. to make an Electuary; Dose dr. iij. thrice a Day.

Sometimes this Disease preludes an Apoplexy; and at others, terminates in a Megrin.

The Apoplexy I have already treated on at large: The Megrin, therefore, is what I shall next take under my Consideration.

C H A P. IX.

Of the M E G R I M.

THIS Disease is so nearly allied to that immediately preceding (especially when that is violent) in its Appearance, that it would seem they scarce deserve to be separated and distinguish'd apart: However, they certainly have their particular and distinct Cause (generally speaking); and also differ from each other in their Natures and Essences.

The Symptoms or Appearances of this Disorder are too well known to need describing here. Its Causes (as I apprehend) are either sanguineous, or nervous; or may be partly one, and partly the other: That is, the Cause may exist, either solely in the Blood,

Blood, or wholly in the animal Spirits; or else, partly in one, and partly in the other.

Noxious Humours in the Blood, are undoubtedly (generally speaking) the remote Cause; and perhaps may have some Share as an immediate Cause.

As is the Root, such will be the Branches, is an old and true Maxim: And hence it will appear, (supposing the Blood to be vitiated) that the animal Spirits, as well as every other Thing fecern'd from it, will partake more or less of its noxious or ill Qualities. But first, concerning the Cause, so far as it may exist in the Blood ———

The noxious Humours existing in the Blood (whatsoever particular Mode, Figure, or Species they may be of; which it would be very vain and chimerical to attempt explaining) do undoubtedly irritate the Nerves, and nervous Fibres, as they circulate with the Blood through the Vessels of the Brain: And such Irritation will always be proportional to their respective Quantities, Qualities, and Velocities. Besides this, the like ill Qualities, existing in the animal Spirits, (though in an infinitely more minute and subtil Nature) may very probably excite intestine, or inbred, irregular Motions and Explosions. And hence, two Causes (the one extrinsic, and the other intrinsic) co-acting, may very reasonably produce all those whimsical, capricious Agitations, both of Body and Mind, that we discern in People under this Predicament.

But when this Disease is strictly nervous, or is originally founded in the animal Spirits, (if such is ever the Case; which cannot be gain said) they must necessarily be, in themselves, weak and depraved. And these Distemperatures (again) must appeal to some inordinate Passions of the Mind, as their Cause: And in that Case the animal Spirits may be said to be vitiated, *à posteriori*; that is, to be polluted by their own Issue or Offspring. ———

Supposing

Supposing the Disease to be intirely or partly sanguineous, the Indications of Cure (in that Case) will be, to correct, alter, and subdue the noxious Humours; or else to expel and discharge them: And 2dly, To strengthen the animal Spirits, and regulate their Motions; or (in other Words) to repair their injur'd Economy. To answer these Ends, I prescribe the following:

Take very fine Filings of Iron, and antimonial Æthiops, of each dr. iv. Rhubarb, dr. ij. Conserve of Scurvy-grass, oz. ij. Syrup of Steel, q. s. to make an Electuary; of which take the Quantity of a large Nutmeg, twice a Day; drinking after it oz. v. of the following Apozem:

Take Eryngo-root, Sarsaparilla, and knotty China, of each oz. ij. Shavings of Ivory, and Hartshorn, of each dr. vj. Coriander-seed, dr. iv. boil in a sufficient Quantity of Water, to three Pints, when strained; to every Pint of which add Viper-wine, oz. iij. Chalybeat Wine, oz. j. Mix.

Take Saffron, scr. j. Human Scull, and best Castor, of each scr. ss. Extract of Rue, scr. j. Confection of Alkermes, q. s. to make a Bolus, to be taken every Night, going to bed.

If the Distemper is judged to have its Foundation in the animal Spirits, I advise as follows; viz.

Take Powder against an Epilepsy, dr. iv. Human Scull, dr. ij. Best Castor, and Troches of Myrrh, of each scr. ij. Gum Galbanum, and Sagapenum, of each dr. j. Extract of Rue, dr. ij. Beat them well into a Mass, with a sufficient Quantity of Balsam of Peru: From every Dram of which make ten Pills; five to be taken three times a Day, drinking after them six Spoonfuls of the following Infusion:

Take Filings of Iron, oz. ij. Peacocks Dung, Species of Diambre, and Nutmeg, of each dr. iv. Root of Male Peony, and Valerian, of each oz. j. Indian Spikenard, dr. ij. Mix, and infuse the Space of three Days, in old Hock, two Quarts, and strain at the time of using.

Exercise, and Spaw Water, are convenient to be used after finishing each Process; but should be used during the Time of taking this latter.

C H A P. X.

Of the F R E N Z Y.

THIS Disease, tho' commonly rank'd amongst the various Kinds of Madness, seems rather to be a-kin to the Megrim: But, as that is more violent than this, in its Nature and Degree; so it has obtained another Name. Indeed, their Causes, notwithstanding what Similitude there may seem to be in their Effects, are certainly very different, generally speaking at least.

A Frenzy is very often the Effect and Companion of a Fever; and sometimes it is the Issue or Legacy of it: Sometimes it proceeds from Excess in drinking of spirituous Liquors; and at others, comes on spontaneously, or is engender'd in the Blood of a Person. Thus as it manifestly does, or may arise from numerous Causes; so it will demand to be consider'd in various Lights.

Indeed, the various Causes here spoken of, are the antecedent, or remote; but as to the immediate Cause, or *causa proxima*, it is always one and the same; that is, hot, acrid Humours in the Blood; which in the Course of their Circulation through the Brain, stimulate the Nerves and Membranes very violently. But notwithstanding the apparent Sameness of the immediate Cause of this Disease; the Methods of Cure will vary according to the different Sources from whence it springs, in different Subjects.

The Intentions of Cure (which are likewise uniform and the same, from whatsoever Source the Disease may arise) are as follow; *viz.* First, To obtund and sheath the morbid Humours, so as to take off or assuage the Violence of their Irritation. *2dly*, To correct, alter, and subdue them in the Body; or,
3dly,

3dly, To eliminate and discharge them out of it. To answer all which Intentions, the following Methods are proposed———And, First,

If a Frenzy is a Symptom and Companion of a Fever; it must be had regard to in the Cure of the Fever to which it appertains: And for that, proper Rules are laid down in the Chapter upon malignant Fevers.

If it is the Issue and Result of a Fever, I advise thus:

Take Gum Guaiacum, scr. j. Calomel prepared, and medicinal Antimony, of each scr. fs. Conserve of Mallow-flowers, dr. ij. Make a Bolus, to be taken going to Bed, every fourth Night; and every next Morning the following Draught:

Take Elixir Salutis, oz. iij. Tincture of Jalap, dr. j fs. Syrup of Succory, dr. vj. Mix.

Take of our Electuary of Quicksilver, dr. iij. for one Dose, to be taken every Night, going to Bed, except when the above-prescribed Bolus is taken.

Take Linseed, and white Sugar-candy, of each oz. ij. Beat them well together in a Marble Mortar, and pour by Degrees the Decoction, as made for Syrup of Marshmallows, q. f. for two Pints, when strained; to which add, Syrup of Succory, with Rhubarb, oz. iij. and make an Emulsion; of which drink a large Draught, three or four times a Day.

If it proceeds from Intemperance, in drinking of hot, spirituous Liquors; hot, sulphureous Baths will be a speedy and effectual Cure: But in Absence of those, I advise as follows:

Take Milk of Sulphur, oz. j. Rob of Elder, and Pulp of Cassia, of each oz. ij. Syrup of the five opening Roots, q. f. to make an Electuary; of which the Quantity of a Chestnut is to be taken every six Hours, drinking after it a Draught of the following Apozem:

Take Tamarinds, oz. iv. of each of the five opening Roots, oz. j. pick'd Sena, oz. fs. Let them be boil'd in a sufficient Quantity of Water, to two Pints, when strained, in which dissolve Manna, oz. iij. Sal Prunel. dr. iij. Mix.

If

If the Disease is spontaneous, or is formed in the Blood, without any Distemper preceding; or other visible Cause, to give Birth to it: In that Case the following Method is to be preferred:

Take antimonial *Æthiops*, dr. iv. Bezoar mineral, and Gum Guaiacum, of each dr. iij. Mosaic Gold, dr. j. Rob. of Jun per, oz. iij. Syrup of Marshmallows, q. s. to make an Electuary; The Dose three Drachms, thrice a Day; drinking after it a Draught of the following Decoction:

Take Shavings of Poch-wood, or *Lignum vitæ*, oz. ij. Root of Sarsaparilla and China, of each oz. j. Turpeth, Mecoacan, and Hermodactyls, of each dr. ij. Figs sliced, oz. iv. Boil all in q. s. of Water, to three Pints, when strained.

These various Methods will (I dare promise) respectively answer the Purposes for which they are directed: Therefore it is needless to multiply Prescriptions upon each particular Case.

CHAP. XI.

Of St. VITUS's Dance.

SOME Persons rank this Disease amongst the various Kinds of convulsive Disorders. I shall not enter into a Dispute concerning the Propriety of this Distinction; though I humbly conceive it cannot justly merit that Character.

That it is a nervous Disease, I allow: and so are many others, besides the convulsive.— The Symptoms or Expressions of this Disease are well enough known to Practitioners in Physic; or at least may be learnt to Exactness from Authors in that Science: Therefore I shall not give myself the Trouble to recite them.

The Phenomena or Appearances that nervous Disorders, in general, present, are extremely abstruse and difficult to be accounted for: But those of the Distemper in Question, seem to be more mysterious than all the rest.

However, I think it may be concluded, that this Disease results, either from morbid Humours in the Blood, irritating and stimulating the Nerves; in Consequence of which, the animal Spirits are excited to very irregular, preternatural Motions: or else, the animal Spirits themselves must be perverted and distemper'd, and thence be subjected to odd, irregular Sallies and Agitations.

It is most certain, that the whole Tribe of nervous Disorders (which are so various and multiform in their Appearances) must spring from one or other of these Sources; *viz.* either from ill Humours in the Blood, which stimulate or irritate the Nerves of this or that Part; or else from a Distemperature of the animal Spirits themselves: And I am rather inclined to think the latter, as to the Case in Question.

But, then, here will arise another Query yet; *viz.* Whence is this Distemperature of the animal Spirits introduced; and how originally formed? Why, undoubtedly, these may derive their Distemperatures from the Blood, whence they are secreted (for it is very reasonable to suppose, that all the Juices, &c. that are secreted from a distemper'd State of Blood, will partake of its Distemperatures, or ill Habits); or otherwise, the animal Spirits may, in themselves, be subject to Depravity and Distemperature; as they manifestly are in some Circumstances of hysteric Disorders.

The animal Spirits, fine and subtil as they are, are nevertheless material; and, considered as such, ought to enjoy a certain necessary Crasis or Texture, in order to perform their respective Motions and Operations justly and equably. But, seeing they are material,

material, they must be subject to Alteration and Change; that is, to Weakness, Relaxation, and Extenuation on the one hand; and to Fermentation, Rarefaction, and Exploſion, on the other: And upon this reasonable Hypotheſis, I think all the various Phenomena of nervous Diſeaſes may be pretty well accounted for.

It is almoſt univerſally allowed, that the natural and regular Motions and Functions of an animal Body depend on a regular and due Influx of animal Spirits to the Nerves, conform to the Dictates of the Will, in a ſound and healthy Perſon: But when the animal Œconomy is perverted and vitiated, (whether in the Sphere of the Blood, or the animal Spirits) the Empire of the Will may be ſuſpended, thwarted, or interrupted. Thus, when the animal Œconomy is *sui juris*, that is, perfect in all its Parts; ſo is the Empire of the Mind or Will, in all its Effects, as well as in itſelf: And, *vice verſa*, when the former is diſtempered, the latter may ſuffer Violence or Interruption; and according to the Quality and Quantity of the Diſtemperature in the former, the latter may be affected and diſtracted from its natural State and Order.

Poſſibly the Nerves of the Parts affected may be too lax and weak, or too tenſe and over-contracted; and, in either Extreme, the Actions or Motions of the animal Spirits, in the ſuppoſed Parts, may become irregular and inordinate.

The ſurpriſing irregular Motions and Geſticulations which People exhibit under this Diſeaſe, leave us no room to be aſtoniſh'd at the Symptoms or Effects of any other nervous Diſorders whatever.—

That wonderful Paſſion (called Longing) in a teeming Woman, with all its ſurpriſing Concomitants and Conſequences, is ſcarce more unaccountable than the Appearances of this Diſeaſe.

The proper Intentions of Cure are, First, To warm and comfort the nervous System: 2^{dly}, To strengthen and invigorate the animal Spirits: 3^{dly}, To restore their injured Crasis or Texture; and to regulate their Actions or Motions. Some Regard should likewise be had to the Blood, lest the Disorders of the former should be originally derived from thence.

The Blood, therefore, ought to be corrected: All its noxious, stimulating, or irritating Particles or Humours be broken, dissolved, or concocted; and its Texture strengthened and confirmed——To answer all which Purposes, I advise as follows; *viz.*

Take antimonial *Æthiops*, scr. j. Species of *Diambre*, and *Hya-cinth*, of each gr. xij. *Venice Treacle*, dr. j. Make a Bolus, to be taken going to Bed; and to be repeated every Night.

Take Tincture of *Hiera Picra*, oz. iv. Chalybeat Wine, dr. iij. Elixir of Property, dr. j. Mix for a Potion, to be taken every third or fourth Morning.

Take native *Cinnabar*, dr. iij. Powder against an *Epi'ep'sy*, and human Scull prepared, of each dr. j ss. *Russia Castor*, and Troches of *Myrrh*, of each scr. ij. Gum *Sagapenum*, scr. iv. *Assafetida*, scr. ij. Extract of *Rue*, dr. ij. Balsam of *Peru*, q. s. to make a Mass for Pills; 8 to be made of every Drachm; five of which are to be taken twice a Day; drinking after them oz. iv. of the following Liquor.

Take the Juices of both Sorts of *Scurvy-grass*, *Water-trefoil*, *Water-creffes*, and *Seville Oranges*, of each oz. x. Mix and filtre; and to every Pint add *Viper-wine*, and *Steel-wine*, of each oz. ij. Mix for Use.

Or, the following Bolus may be given now-and-then, instead of that described above.

Take Powder of *Virginian Snake-root*, *Cassumuniar*, and volatile Salt of *Vipers*, of each gr. x. Confection of *Alkermes*, q. s. to make a Bolus.

When the Cure is completed, or pretty far advanced, Exercise and *Spaw Water* will be very advisable, either to assist, or prevent a Relapse.

C H A P. XII.

Of MADNESS.

THIS Disease (as to its common and various Appearances) is so well understood, that it needs no particular Description.

In some Subjects it is continual, and admits of no Interval, from the Time it seizes them, till they are cured, or Death puts an End to it. In others, it allows Intervals of Reason; and then is commonly called *Lunacy*, because the Paroxysms generally come on about a New or Full-Moon.

The Reasons of such periodical Returns are easily to be explain'd, I think. For we are to suppose the morbid Humours do exist in the Blood during the other Stages of the Moon, though then dormant, or quiescent: But as the whole complex Fluid becomes more rare, expanded, and agitated, at these particular Periods of the Moon's Revolution; so the morbid Humours in the Blood (sharing in the same Fate with the rest) display themselves in such Manner, and with such Force, upon the Brain and Meninges, as to transpose the regular Order of the animal Spirits, and consequently the Operations of the Mind.

This same Disease, as it affects various Subjects, will exhibit very different Appearances. For we see some mad People, who manifest the utmost Gaiety, and Transport of Mind, interspers'd with wild, romantic Flights of Thought and Expression. Others, again, are dejected and melancholy, even to Stupidity. Without doubt the former are (in their own Imaginations) wreathed with inexpressible Glory and Splendor; whilst the latter Sort can see nothing but Horror, and gloomy Despair. And, nevertheless, these opposite Effects may spring from the same specific Cause, only disposed in different Habits.

The immediate and internal Cause of this Disease (under all its various outward Shapes and Appearances) consists in a Depravation and Perversion of the natural Order and Actions of the animal Spirits; which, as they immediately subtend the Mind, so that must necessarily become depraved and perverted likewise. But as for the *Causa media*, or *mediate Cause*, (which expresses the Essence also) that consists in morbid or ill Humours in the Blood.

I shall not pretend to explain concerning the specific Nature of these morbid Humours; as, whether they retain to the Acid, or to the Alcaline; to the Saline, or to the Terrestrious; because the utmost Extent of human Capacity, and Conjecture, would leave us, at last, very much in the dark about them.

As to the antecedent, or most remote Causes of this Disease; they may, indeed, be various: *Ex. gr.* All the various Passions of the Mind, such as Love, Despair, great Disappointments, grievous Distress, impetuous Rage, or a constant and severe Tension of Mind, or Application to the Study of Things that are in their Nature abstruse, dark, intricate, and perplexing. But sometimes, however, the Causes are spontaneously formed, and engender'd in a Person's Blood, without any of these preceding, or appearing in the least as Accessories.

It would seem a very difficult Task, to explain how those Passions of the Mind should act upon the Humours of the Blood, in such manner as to vitiate and pervert them: But so it is, in Fact, as daily Experience testifies. Sometimes, indeed, an excessive Degree of Passion will affect the Mind immediately, so as to vitiate or pervert its Œconomy and Operations: But such an Effect would be momentary, or of short Duration only; except the diseased Mind should immediately impress its Malignity on the Blood, and so make that a Party in the distemper'd State. And, indeed, it is an old Maxim, (generally held) That
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the Disaffections, as well as the *Pathemata* of the Mind and Body, act upon, and affect each other, mutually and reciprocally. But, to lend more Force and Weight to this Opinion — That the Cause of any lasting Madness, generally speaking, exists in the Blood, we need only allude to a Distemper some what a-kin to this; which is the *Hydrophobia*, or *Rabies Canina*. And that Disease (as 'tis well known) is caused by Venom, convey'd into a Person's Blood from the Bite of that Animal. And it is likewise evident, that the supposed Venom so communicated, (if not speedily corrected, or expell'd) will vitiate and pervert the whole Mass of the Person's Blood, and change it into its own poisonous Nature. And so soon as this dismal Change is brought about, the Person grows mad, and manifests all the same Symptoms that appeared in the diseas'd Animal.

We must necessarily suppose, though the morbid Humours, productive of Madness, under its various Appearances, are specifically the same, that they nevertheless differ from each other, in Magnitude and Solidity, if not in Figure likewise; for it is evident, that the same specific Matter, differing in the respects above-mention'd, is capable of producing either the greatest Pleasure, or the greatest Pain: And thus the morbid Particles, or Humours productive of Madness, may (according to their respective Figures, Magnitudes, and Solidities) excite Gaiety, Transport, and Ecstasy, on the one hand; or Dejection, Melancholy, and Stupidity, on the other. I therefore suppose, that the morbid Particles (productive of the gay, splendid Madness) are very fine, subtile, and solid; but that those that subtend the opposite Kind, are coarse, gross, and of a loose Texture and Nature. And furthermore, this way of Reasoning upon them will be justified, *à priori*; that is, from the Methods of Cure commonly practis'd under those different States of it. Thus far of the Causes. We now proceed to consider

the Indications, or Intentions of Cure. And these are (with regard to the first-mention'd Appearance, where Gaiety, Transport, and Raving, predominate) close Retirement, Absence from Light, Noise, and Company; a thin, soft Diet; Abstinence from all Things that are spirituous and spicy, whether they be Meats or Drinks. As to what regards the Province of Medicine, proper Evacuations (such as Bleeding and Purging) are to be frequently practised. Besides these, such Things should be given in the Interval of Purging, as may correct and alter, break, divide and comminute, or digest and concoct the morbid Particles or Humours. To answer these medicinal Views, I direct as follows; *viz.* (after Blood-letting)

Take of Flowers of Antimony, gr. x. Of Extract of black Hellebore, dr. j. Make twenty Pills; of which let the Patient take two or four (according to its Manner of operating) every fourth Night, and the following Potion every next Morning:

Take Decoction of Tamarinds, (with Hermodactyl-root, and Me-coachanna, of each dr. ss. boil'd with it) oz. iv. in which dissolve Manna, oz. j. Glauber's Salt, dr. vj. Make a Potion.

Take native Sulphur, dr. vj. Powder of black Hellebore-root, dr. iij. Rob of Elder, oz. iij. Syrup of the five opening Roots, q. s. to make an Electuary, whose Dose is dr. iij. twice a Day; drinking after, half a Pint of the following Apozem:

Take each of the five opening Roots, oz. j ss. Elder-flowers, m. j. Mecoachan and Hermodactyl roots, of each dr. j ss. Boil in a sufficient Quantity to two Pints, when strain'd; in which dissolve Salt of many Virtues, dr. ij. Simple Spirits of Scurvy-grass, dr. iij. Mix.

Take of our Electuary of Quicksilver, dr. iv. for one Dose. To be taken every Night.

The Use of all hot, sulphureous Baths, both inwardly and outwardly, must be of great Benefit in this Kind of Madness.

The Electuary above-describ'd will both obtund and sheath, and digest and concoct, the morbid Humours;

mours; and the other Medicines will cool, correct, and expel them. I therefore advise, that this Process be continued till the Patient is recover'd, or till some sufficient Reason demands a Change.

When Madness appears in the opposite Shape, viz. when it inclines to Dulness, Stupidity, and Idiotism; the Intentions are then, to correct and alter, attenuate and thin, heat and agitate the Humours. To answer these Ends, I advise as follows:

Take fine Filings of Iron, dr. vj. Antimonial Æthiops, dr. iv. Powder of Arum-root, dr. ij. Gum Sagapenum, dr. iij. Extract of black Hellebore, dr. j fs. Mix, and with q. s. Balsam of Peru make six Pills from every Drachm of the Mass; five of which let be taken twice a Day, drinking after them four Ounces of the following Liquor:

Take Juice of Garden Scurvygrafs, two Pints; and Juice of Seville Oranges, oz. viij. Mix, and filtre; and to every Pint add Viper-wine, oz. iv. Steel-wine, oz. j fs. Mix for the Use before-mentioned.

Take Glas of Antimony, gr. x. Gum Sagapenum, dr. j. Make into thirty Pills; three of which are to be taken every third Night, either increasing or diminishing the Dose, as you see Occasion.

N.B. *It's necessary these Pills (of Glas of Antimony, &c.) should excite a little Vomiting towards Morning; but not too much of it.*

In this Circumstance of Madness, the Use of Light, Society, and Exercise, are to be advised.

I recommend that this Method be continued for the Space of several Months, or even till the Patient is restored to Health; For, though in acute Diseases it may be necessary to vary or change our Medicines every six or eight Hours, sometimes; yet in chronical Cases, (such as these especially) when we have once formed a right Judgment of them, and have determined on a proper Method of Cure, it must be altogether needless, and even preposterous, to vary; except some very remarkable Incident, or Change in the Face of the Distemper, require it.

C H A P. XIII.

Of the HYDROPHOBIA.

THE Symptoms, or Appearances of this Disease, are always the same, or nearly so; and, consequently, they are so well known, as to need no particular Description here.

I believe there is scarce any Instance of a Person's being cured, in whom this Disease had once manifested itself. Therefore all the Secret lies in preventing the Access of it. Prevention, indeed, is the best Cure in every Disease; and is the only one in this. But before I proceed to consider its Cure, I will briefly inquire into its Nature and Essence.

This Disease (as it affects human Beings) is always communicated by the Bite of a mad Dog [Cat, &c.] (except one human Being should bite another of the same Species, which, doubtless, would as certainly communicate the Disease). So soon as those Animals are seiz'd mad, they foam, or froth violently at the Mouth. This Foam or Froth (as I take it) is no other than so much of the *Virus*, or Poison, thrust off at the Glands of the *Fauces*, by means of the exorbitant Ferment and Rarefaction of the said Animal's Juices. When one of those enraged Animals bites any Person, so as to make a Wound, we are to suppose some of that venomous Froth is instill'd into the Wound. One would imagine, indeed, where a Wound is made deep enough to draw Blood, that the Blood immediately issuing from it, should repel or wash away the Poison that was projected into it. And this, doubtless, it does; in some measure, at least. But, nevertheless, the small Proportion left behind (which, were it collected and weighed, would not amount to a Grain, perhaps) is sufficient to contaminate and poison the whole Mass
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of a Person's Blood, (if not timely prevented by proper and effectual Remedies) and to precipitate them into a most deplorable Disease and Death.

How is it possible to form an adequate Idea of this poisonous Ferment? or to circumscribe its Virulency with imaginary Bounds? It is (properly speaking) a poisonous Ferment; and that (without Doubt) of the most corrosive and virulent Nature.

We have great Reason to imagine, and conclude from Observation and Experience, that one single Grain of this vitious, fermentative Matter, (if successively propagated) would be sufficient to destroy the whole human Species; and, perhaps, all other Animals besides.

We take it for granted then, that the Essence of this Disease consists in a poisonous, fermentative Matter, which is absorb'd into the Blood-vessels, by means of a Wound. This poisonous Ferment (so soon as communicated to a Person's Blood) operates upon it in such manner, as finally to convert it into its own specific Nature and Essence. So soon as this Prelude is effected, then the Tragedy breaks out; at which Time it is too late to put a Stop to it. Thus much of the Cause, Nature, and Essence of this Disease. We now proceed to consider the proper Intentions of Cure.

These are either to correct, vanquish, and subdue the poisonous Ferment, or else to expel it out of the Body.

The Method in common Use (and which has been practis'd from Time immemorial) is Immersion in the Sea. It seems to me pretty extraordinary, that Immersion in the Sea should be equal to the Importance of this Case; that is, should correct, conquer, and subdue this tyrannical Ferment. It is very certain that Practice has fail'd (in some Cases) of Success; and I very much doubt if ever it really wrought a Cure of itself, unassisted by other Means. If it really does,
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and has perform'd Cures in these Cases, it would puzzle a Conjuror to explain by what Mechanism it atchieves so miraculous a Thing. But, to suppose the most in its Favour; it will not be amiss, however, to propose some other Things, to aid and assist it.

I apprehend, that the last Remedy, as it is call'd, and which is commonly practis'd to extirpate other stubborn, ill Habits, (*viz.* a Salivation) would prove the first and best Cure here: Especially, if directed with good Judgment, and duly extended as to Time and Degree, I cannot help thinking, that it would answer. But, subordinate to that, are some other Methods, which afford us no small Hope of Success. These are as follow, *viz.*

Take of our Electuary of Quicksilver, lb. j. Of which let the Patient take dr. iv. for a Dose, every Night and Morning, on the Days when he doth not take a Purge.

Take Calomel prepar'd, and medicinal Antimony, of each gr. xij. Gum Guaiacum, scrup. j. Venice Treacle, dr. j. Make a Bolus. To be taken at Bed-time, every fourth Night; and every next Morning the following Draught:

Take Sena, dr. iij. Turbith-root, Mecoachan and Hermodactyl-roots, of each dr. fs. Aniseed, scrup. j. Boi in q. f. of Water, to oz. iv. when strain'd; in which dissolve Manna, and Glauber's Salt, of each dr. v. Mix.

Another Prescription, instead of the Electuary:

Take Antimonial Æthiops, and Filings of Iron, of each dr. vj. Rhubarb, and Extract of black Hellebore, of each dr. iij. Balsam of Peru, q. f. to make a Mass, fix Pills out of every Drachm; five of which let the Sick take twice a Day.

It is adviseable, that Plunging in the Sea should precede the Use of these Medicines; and that it be practis'd every Night and Morning, for four or five Days successively, beginning as soon as possible after the Accident.

C H A P. XIV.

Of DEAFNESS.

THE Causes of this Disorder are various; that is, they are sometimes external; at others, internal. When the Cause is external, it consists in a Load of tough *Cerumen*, or Wax, which sticks to the outward Surface of the *Tympanum*, or Drum of the Ear; by which means the Perception of those Vibrations, which all Sounds cause in the Air, (the Medium they move in) is either lessen'd upon that Organ, or totally lost.

When that is the State of the Case, however, it easily admits of a Cure. When the Cause is internal, we must suppose the auditory Nerves are obstructed; so that the animal Spirits are denied Access to the Sensory. The auditory Nerves (and the same of any other Nerves) may be obstructed several ways; *viz.* either by sharp Humours falling upon them, which, by their Stimulus, or Irritation, contract and lessen their Channels; or else by some extrinsic Incumbrance, Weight, or Oppression. And these, or either of them, might happen from the undue Distention of such Glands and Blood-vessels, as lie contiguous to them. Or these Nerves may be obstructed (perhaps) by some intrinsic Cause. Or, lastly, they may become too lax, weak and flaccid, and in a State of comparative Inanition; under which Circumstance they could not duly report the Impressions made on the *Tympanum* to the Brain. But there may be yet another Cause assign'd, which lies betwixt these two Extremes; *viz.* the Organs themselves, that is, the *Tympanums*, may grow too lax, weak, and flabby: In which State they will necessarily absorb, and drink into their own Substances a great deal of pituitous, fizy Humour; in

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consequence of which, they will grow thick, obtuse, and intractable.

When the Disorder in question is an Effect of the Cause first assign'd, it will soon be reliev'd by the following Mixture and Injection:

Take Linseed-oil, dr. iv. Oil of Amber, dr. fs. Oil of Savin, gutt. x. Mix, and instil a few Drops made warm into either Ear, Night and Morning, for a Week; and afterwards to use this following Injection:

Take Marshmallow-root, fresh, and well-clean'd, oz. ij. Boil in q. f. of Water, to oz. iv. when strain'd: To which add Honey of Herb Mercury, oz. ij. Salt of many Virtues, dr. ij. Make an Injection: To be injected into the Ear warm, often in a Day, by a Syringe.

If this Disorder results from an Obstruction of the auditory Nerves, whether the suppos'd Obstruction is produc'd from an intrinsic or an extrinsic Cause, the following will be useful, and, I believe, successful.

Take Gum Guaiacum, scrup. j. Calomel, gr. xij. *Matthew's* Pill, gr. x. Balsam Peru, q. f. to make a Bolus. To be taken every third Night.

Take Milk of Sulphur, dr. vj. Filings of Iron, dr. iv. Rhubarb, and *Poteries's* Antihectic, of each dr. ij. Rob of Juniper, and Caryocostin Electuary, of each oz. j. Syrup of Ginger, q. f. to make an Electuary; Dose, dr. iij. To be taken twice a Day, drinking after oz. iij. of Scurvygrass-juice depurated.

Take medicinal Antimony, gr. xij. Glass of Antimony, gr. j. *Matthew's* Pill, gr. x. to make four Pills. To be taken at Night going to Rest, twice a Week.

Hot, sulphureous Waters, taken inwardly, will be of Use in this Case; except occasion'd by a lax, weak State of the Nerves: And, upon that Supposition, (indeed) the Milk of Sulphur had better be left out of the Electuary.

Supposing the *Tympanums* to be over-lax and flabby, and their Substances to be thickened, by an Incorporation

ration of fizy, pituitous Humours; in that Case, the first Indication is to deterge and cleanse, by proper Aperients and Cathartics: And the second, and last, is to restore and confirm the relax'd Glands and Fibres, &c. To answer which Purposes,

Take strain'd Gum Ammoniacum, dr. j. Russia Castor, and volatile Salt Armoniac, of each scrup. ij. Balm of Gilead, q. s. to make a Mass for twenty Pills; four of which are to be taken every Night, going to Rest.

Take vitriolated Tartar, dr. iv. Arum-root, and Rhubarb, of each dr. ij. Vitriol of Steel, scrup. ij. Caryocostin Electuary, dr. x. Syrup of Succory, q. s. to make an Electuary, the Quantity of a large Nutmeg: To be taken twice a Day.

Take a strong Decoction of the five opening Roots, and the Juice of Scurvygrass depurated, of each one Pint. Chalybeat Wine, oz. iv. Mix. To take a Quarter of a Pint after every Dose of the Electuary.

When the Organs shall seem to be pretty well purg'd and cleans'd, and the Faculty of Hearing begins to revive, let the Patient proceed with the following.

Take Tincture of Castor, and *Mynsicht's* Tincture of Steel, of each dr. iv. Mix. To take sixty Drops twice a Day, in a Draught of Water; and at the same time to drink of the *Spaw* Waters.

I have heard great Commendations of a certain outward Remedy for Deafness, proceeding from an inward Cause. It is what, indeed, I never experienced: And, besides, it favours a little of Quackism. But, however, since I must give Credit to my Informers, and as the Thing really promises something, so I shall give it as I had it. It is this:

Take of Male Frankincense, Myrrh, and Storax, of each equal Parts. Bruise all together, and strew some of the Powder upon a brisk Charcoal-fire. Receive the Fumes in a Plat of Tow, made commodiously, in the Form of a Cake, and apply that (whilst hot) to the Crown of the Head, and bind it on pretty tight. The Head should be close shorn, and this Operation repeated every Night and Morning, for some time.

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This Thing will certainly warm and comfort the Nerves, and invigorate the animal Spirits. Besides, it may help to dissipate phlegmatic, fizy, pituitous Humours. In a word, I believe it will, in all respects, equal, if not excel, *Les Peaux divines* *, so much celebrated in *France*.

C H A P. XV.

Of the OPTHALMIA, and other Diseases of the Eyes.

THE *Ophthalmia* might very justly challenge a Place amongst inflammatory Diseases. But as it has its Seat in the upper Region of the Body, so I chuse to consider it under that Division; and to bring other Diseases, incident to the Eyes, into the Account at the same Time. But, First, of the *Ophthalmia*.

This Disease may proceed from various Origins, or antecedent Causes. But the *Causa proxima*, or immediate Cause, is always one and the same; viz. an immoderate Distention of the fine arterial Vessels of the Eyes, attended with Heat, Tension, and Pain.

This Disease may (as it evidently often does) proceed simply and solely from an increas'd Quantity, or from an increas'd Motion, of the Fluid: As is the Case, when it arises from taking Cold, on the one hand; or from excessive Drinking, or violent Exercise, on the other. And when it flows from either of those Sources, the Cure is very plain, and may be easy and speedy. But sometimes the same specific Malady has a much deeper Root; and then it will be found (in proportion) harder to extirpate. As for Example: When it has its Foundation in an ill Habit of Blood (whether of the scrophulous, pocky, or scorbutic Kind); when such Humours as these (just

* Which are Skull-caps, made of thin Skins.

mention'd) stagnate in the fine capillary Vessels of any Part, and so give Birth to an Inflammation; 'tis very easy to discern, that the Cause, and consequently the Effect, will be much harder to remove, than if the like Effect proceeded from some slight, common Cause.

It is the great Difficulty found in removing some Disorders of this Sort, which have arisen from radicated, compacted Humours, that have led many Practitioners into an Error, and made them conclude, that the Diseas'd had a latent Pox in his Blood for twenty or thirty Years past, which had never manifested itself by any Symptom (as a Pox) till then: And hence that common, vulgar, and preposterous Notion, That a Person may carry a Pox about him for the Term of a whole Generation, without knowing any thing of the Matter.

I have detected this erroneous Opinion in many Instances, and the wrong Judgment from whence it springs; which is just this, *viz.* When any Person is seiz'd with an *Ophthalmia*, caused by the Stagnation of radicated, compacted Humours, (and such as are not easily divisible, or dissolvable) the Physician (not discerning, perhaps, from what Cause it springs) treats it as the Effect of some slight, common Cause, and finds all Applications of that Sort in vain. He then raises the Key of his Prescriptions gradually; till, from the Vegetable and Galenical, he comes to the Mineral and Chymical. After he has been for some time engag'd in this latter Sphere, he finds his Wishes answer'd, and his Patient cured. Hereupon, because the Malady had eluded the Force of common simple Remedies, and at last yielded to those of a more powerful and excellent Nature, (of the antivenereal Tribe, perhaps) he concludes the Case was pocky. Then, to justify his unwarrantable Suspicions and Conclusions, he interrogates his Patient, and asks him the plain Question, If he had never been clapp'd?

The Patient (as it's many to one) replies, That, indeed, he had been clapp'd twenty or thirty Years ago, perhaps more, or less; but apprehended he had been perfectly well cured. The Doctor shakes his Head, and says, No! Assures the Patient he had only been patch'd up; and that the late Disorder was, in its Nature, pocky. Such preposterous, dogmatical, and arbitrary Conclusions, would make a Man of a small Share of Honesty, as well as Reason, stare, if not swear. For why (in God's Name) may not any stagnant Humours in a Man's Body be of a compacted, solid, stubborn Nature, without the Necessity of a pocky *Substratum*? Are not the constituent morbid Humours of the Gout and Stone (not to mention many other Kinds) as hard to be cured as those of the Pox? Yes, surely; and harder too. But to resume my Subject.

When an *Ophthalmia* proceeds from a fresh Cold, the Indications of Cure are these: *viz.* To attenuate, resolve, and evacuate the stagnant or obstructing Humours.

To answer which Ends, First, let Blood plentifully; either from the Foot or Arm. Afterwards proceed as follows:

Take Milk of Sulphur, dr. iij. *Poterius's* Antihectic, dr. ij. *Russia* Castor, dr. j. Salt of Amber, and white Sugar-candy, of each dr. ss. Make a Powder, to be divided into six Papers; one of which to be taken three times a Day, drinking after, a large Draught of the following Apozem:

Take of the five opening Roots, of each oz. j. Turbith-root, Mechoacan, and Hermodactyl, of each dr. j ss. Boil in a sufficient Quantity of Water to three Pints, when strain'd: To every Pint of which add Manna, dr. xij. vitriolated Tartar, dr. j. Mix.

Blisters will be of Use, and may therefore be applied at Discretion.

The Success of the above Method may be depended on: Therefore I advise, that they are continued till a Cure is completed.

If this Complaint arises from hard Drinking, or violent Exercise; in such Cases (Bleeding being premised) Things that cool and condense, with gentle Evacuation, will do the Business. To this End,

Take Crystal of Tartar, oz. j. Crystal Mineral, [Sal Prunell.] oz. ss. Pulp of Cassia, oz. ij. Syrup of the five opening Roots, q. s. to make an Electuary, whose Dose is dr. iij. three times a Day, with six Spoonfuls of the following Apozem:

Take Decoction of Tamarinds, oz. xx. Syrup of Elder, oz. iv. Make an Apozem.

When this Distemper challenges a more remote and radicated Cause, such (for Example) as any of the various Kinds of ill Humours above-mention'd; then, indeed, we must have a further Recourse. Here, likewise, the proper Intentions of Cure are to attenuate or resolve, to correct and alter, to break to pieces and divide, to dislodge and discharge the morbid Matter: But then these same Ends won't be so easily accomplish'd in this Case, (where the Humours have, by Time or Accident, acquir'd a considerable Degree of Density and Solidity) as in those lately treated on. Things being thus circumstanced, I recommend as follows:

Take white Sugar-candy, and Gum Guaiacum powder'd, of each dr. iv. Mix very well, in a marble Mortar; to which add, by little and little, Yolk of Egg, q. s. Beat it well, until the Gum Guaiacum seems to be dissolved; then add Antimonial Æthiops, dr. vj. Conserve of Scurvygrafs, oz. ij. Make an Electuary; of which take dr. ij. every Night and Morning, drinking after, half a Pint of the following Decoction made warm:

Take *Lignum Vita* Shavings, Root of Sarsaparilla, and China, of each oz. ij. Bark of Sassafras, and *Lignum Vita*, of each oz. j. Liquorice-root, dr. xij. Coriander-seed, dr. iv. Infuse warm twenty-four Hours, in eight Pints of Lime-water, the Vessel being well-clos'd; then strain, and depurate it.

Another Method:

Take Rhenish Tartar, scrup. j. Calomel, gr. xij. Medicinal Antimony, gr. x. Venice-treacle, q. s. to make a Bolus. To be taken

taken at Bed-time, every third Night; and every next Morning the following Potion:

Take Sena, dr. ij. Turpith-root, Hermodactyl and Mecoachanna-roots, of each dr. ss. Salt of Tartar, gr. x. Boil in q. f. of Water, to oz. iij. when strain'd; in which dissolve Manna, oz. j. Glauber's Salt, dr. v. Mix for a Potion.

Take Æthiops Mineral, dr. vj. Gum Guaiacum, and Bezoar Mineral, of each dr. ij. Rob of Juniper, oz. iij. Syrup of Succory, with Rhubarb, q. f. to make an Electuary, whose Dose is dr. iij. three times a Day; drinking after it oz. iv. of the forewritten Decoction.

By one or other of these Methods, duly pursued, (observing at the same time a regular Diet) I dare promise the Disease will be cured; therefore advise the Continuance of it, till the End is answered. Amongst Topics, I recommend the following, *viz.*

Take the Root of *Solomon's Seal* boil'd tender, oz. iv. Venice-treacle, and Ointment of Tutty, of each oz. j. Salt of many Virtues, dr. iij. beat well into a smooth Pulp. To be applied after the manner of a Cataplasm.

Otherwise,

Take Pippins roasted under the Embers, oz. iv. Woman's Milk, oz. ij. Sal Armoniac finely powder'd, dr. ij. beat well together for a Cataplasm, to be applied to the Eyes.

Errhines may be of Use in these Cases; especially after the stagnant Humours have been in some measure resolv'd, or attenuated by proper Internals. I recommend the following:

Take Flowers of Lilies of the Valley, Syriac Marum, and Marjoram, of each dr. ss. Root of white Hellebore, gr. xv. Make a fine Powder for Snuff.

SUFFUSIONS and CATARACTS.

THESE two are, in Nature and Essence, the same; and only differ in Age or Degree. A *Suffusion* always precedes a *Cataract*; and is just as previously necessary to it, as Boyhood is to Manhood.

I think

I think it is pretty easy to explain by what Mechanism a *Suffusion* is first formed; and how it is afterwards transformed into the Substance of a *Cataract*.

There are two immediate or contingent Causes, assign'd by Authors, for the Disease call'd a *Suffusion*. And these, indeed, are all that can reasonably be supposed. *First*, The aqueous Humour of the Eye (which is the proper Sphere of these Disorders) may be, in itself, depraved, perverted, and chang'd from its natural State, both in Consistence and Colour. *Secondly*, The said aqueous Humour may be polluted and vitiated, in both the mention'd respects, by the Intrusion, Afflux, or Insinuation of foreign or extraneous Humours, of the pituitous Kind. I shall not enter into a Controversy with *Riverius*, whether a *Suffusion*, proceeding from the first-mention'd Cause, is curable, or not? However, I tacitly cherish the opposite Opinion to his; and, perhaps, may offer some solid Reasons to support it, by-and-by. But to proceed.

From whatsoever immediate or contingent Cause this Effect may arise, the Consequence is plainly this; *viz.* The aqueous Humour of the Eye, being either depraved, perverted, or polluted, becomes preternaturally dense and opaque; that is, its Substance grows slimy or mucilaginous, and its Colour proportionably dull and cloudy (Indeed, this latter is always a Consequence of the former, in all Fluids whatsoever). Hence the visive Faculty must necessarily (as it always does, in Fact) be obstructed and diminish'd. Thus far of a *Suffusion*; for all these Phænomena are strictly comprehended under that Name. But when (by Time) these mucilaginous, viscid, tenacious Humours, have acquired a certain necessary Degree of Force and Substance, their Parts then attracting more powerfully to each other, than they are attracted by the Fluid in which they are immersed, (and were before intimately blended and mix'd)

mix'd) separate themselves from it, and unite together (as it were) in a Point, but in a more dense, compact, and solid Substance; and then they obtain the Name of a *Cataract*.

This Substance (being thus formed) generally disposes itself before the Pupil, and so interrupts the Sight. But wheresoever it may, at first, dispose and place itself, it will, by Time, (if not destroy'd or extirpated) increase, dilate, and spread itself so far, as finally to obstruct the Sight.

The Colour, and other Circumstances of Suffusions, and their usual Consequences, Cataracts, are very various. And this is not at all to be wonder'd at; for they must necessarily vary, according as the Depravations that happen in the aqueous Humour intrinsically, or as the foreign, extraneous Humours (which insinuate into it, and pollute it) may vary. *Riverius* is very copious upon this Head: To whom I must refer such Readers as would be more particularly and minutely inform'd; for I cannot take the Trouble, nor, indeed, do I think it is worth the while to quote him.

If the Cause of this Disease is judg'd to consist simply and solely in a Depravation and Perversion of the aqueous Humours, (and all Humours, especially such as are comparatively stagnant, are certainly liable to such Changes) then the Blood should seem to merit very little Regard in our Attempts of Cure. However, though the aqueous, and other Humours of the Eye, have not an open and visible Communication with the Blood, yet have they a more secret and remote one; and, consequently, any necessary good Qualities impress'd on the Blood, will very probably be communicated and continued (in a comparative Degree, at least) to the Humours of the Eye. And this being granted, it is a Consequence, that any intrinsic Depravations, Perversions, or Vitiations, may be connected, mended, or repaired, by proper Medicines

dicines taken inwardly. But if, on the contrary, the Disease proceeds from tough, fizy Humours, secreted from the Blood; then, 'tis plain, our Applications must be directed to the Blood: Except the Distemper is gone so far, as to admit no Hope of a Cure, but by the Operation call'd Couching.

The contingent or immediate Causes of this Malady have already been explained, and the mediate Cause sufficiently specified. As to the antecedent or remote Causes, they are whatsoever may engender slimy, viscous, fizy Humours; either intrinsically, in the Humours of the Eye; or else first in the Blood, and afterwards determine them on the Eyes. And these are frequent Catchings of Cold; an habitual Constipation of the excretory Pores of the Skin; Errors, either in our Accretions, or our Secretions; Errors or Defects in the Use of the *Non-naturals* in general; a cold, scorbutic, or cachectical Habit, &c.

Since the antecedent and original Causes of this Disease are so many and various, it may be thought, perhaps, (as *Riverius* intimates) that the Intentions and Methods of Cure should vary accordingly. But I apprehend, however, that will not be so much required here, as in some other Cases: For, be the original Cause what it will, the ultimate Effects, and the noxious Humours that subtend the Disease, are always uniform, and the same, or nearly so.

The proper Indications of Cure, are, to attenuate and resolve, correct and alter, deterge and cleanse, universally; as well the Blood and Vessels in general, as the Humours, Glands and Blood-vessels of the Part or Parts affected. And, to answer these Purposes, I advise as follows:

First let Blood, to twelve or fifteen Ounces. Then,

Take Filings of Iron rubb'd very fine, oz. j. Medicinal Antimony, *Poterius's* Antihectic, and choice Rhubarb, of each oz. ss. Caryocostin Electuary, and Rob of Juniper, of each oz. ij.

Syrup of Steel, q. s. to make an Electuary: Of which take dr. ij. thrice a Day, drinking after, oz. iv. of the following Apozem:

Take Scurvygrafs-juice of both Sorts, Water-trefoil, Brooklime, and Seville Oranges, of each oz. xij. *Lignum Vita* Shavings, Sarsaparilla-root and China, of each oz. j ss. Coriander-seed, dr. iv. Infuse warm a Night; then just let it boil, and strain it; and to every Pint add Syrup of Succory, oz. j ss. Chalybeat Wine, dr. vj. Vitriolated Tartar, dr. j. Mix.

If the above should not purge to the Amount of three or four Stools every Day, (which I expect they will) intermit every fourth Day; and give the following in their room:

Take Gum Guaiacum, scrup. j. Calomel, gr. xij. Venice-treacle, dr. ss. Make a Bolus: To be taken at Night, going to Rest.

Take Tincture of Hiera Picra, oz. iv. Simple Spirits of Scurvygrafs, dr. j ss. Mix for a Potion. To be taken next Morning.

By the continued Use of these Medicines, the Source, or first Cause of the Disease, (which, as above observ'd, consists, generally speaking, in viscus, fizy Humours in the Blood) will be sup-
planted; the Glands and Blood-vessels of the Part or Parts will be deterg'd, cleans'd, and freed from their incumbent ill Humours; and will be strengthened, so as to resist the Access of more. Thus the Root of the Disease will be cut off, or extirpated; and the Disease itself (for want of a fresh Supply of Humours to nourish it) may decay, and become extinct.

Blisters, or a *Seton* in the Neck, may be of Use. If Topics, applied to the Eyes, can be of any Service in these Cases; I apprehend the following may be as good as any.

Take Frogs Spawn-water, oz. iv. White Vitriol, scr. ij. Sugar of Lead, scr. j. Mix for a Collyrium to be injected into the Eyes through a Syringe.

Take

Take common Alum powder'd, oz. j. boil it gently in a Pint of fresh Cow-milk, until it begins to separate: Then strain lightly the Whey from the Curd; which apply to the Eyes after the manner of a Cataplasm, after the Use of the Injection or Collyrium.

Possibly these Medicaments may penetrate to the interior Glands and Blood-vessels of the Eyes; and (if so) may be of great Use, by hindering a further Afflux of Humours.

Defluxions.

DEfluxions on the Eyes are most commonly the Effect of a Cold: But sometimes, however, they are a Legacy of the Small-Pox, or of other putrid and malignant Fevers. But, from what Cause soever this Disorder may spring, the Indications of Cure are, 1st, Copious Evacuations, and Revulsion. 2^{dly}, To correct or resolve the saline or viscous Humours. 3^{dly}, To evacuate the superfluous, morbid Humours, by some proper Secretion (such as Sweat, Urine, or Stool): And lastly, to strengthen and restore the Glands and Vessels of the Parts affected. To answer all which Intentions, proceed thus. First, draw Blood from the Foot, to oz. xv.—Then

Take Rhenish Tartar, dr. ss. Calomel, gr. xv. Venice-treacle, dr. j. make a Bolus, to be taken at Bed-time, every third Night; and every next Morning the following Draught:

Take Sena, dr. ij. Root of Turpeth, Hermodactyl, and Mechoacan-roots, of each dr. ss. Salt of Tartar, gr. x. boil in a sufficient Quantity of Water, to four Ounces, when strain'd; to which add Manna, oz. j. Glauber's Salt, dr. v. Vitriolated Tartar, scr. j. Mix.

Take Filings of Iron, in very fine Powder, dr. iv. Medicinal Antimony, and Rhubarb, of each dr. ij. Rob of Juniper, oz. ij. Make an Electuary, with q. s. of Syrup of the five opening Roots. Dose dr. ij. thrice a Day.

Take

Take Lignum vitæ Shavings, lb. ss. Polypody-root, oz. iv. Sharp-pointed Dock-root, oz. ij. Seed of Scurvygrass and Water-creffes, of each dr. j. Infuse warm, 24 Hours, in ten Pints of Lime-water; half a Pint of which is to be drank after every Dose of the Electuary.

I believe this Process may be depended on; and therefore it would seem needless to say any more upon that Head: However, I cannot omit to mention the great Benefit that sometimes results from Issues in the Shoulders, and the Juice of Wood-lice, taken in *Rhenish* Wine; also the Collyrium and Cataplasm above directed (in the Case of a Suffusion, p. 72, 73.) will be useful here (Evacuations being premised).

Of the Gutta Serena, or BLINDNESS, from some invisible, inward Cause.

THIS melancholy Distemper (provided nothing appears adhering to the outward Tunicle or Coat of the Eye; nor yet any opaque, dense Substance floating in the Humours, so as to interpose betwixt the Pupil and the Light; or, which is the same Thing, the Vertex of the Eye) may be judged and determined to proceed from an Obstruction of the Optic Nerves: Whence the Access of the animal Spirits to the Organs is interrupted, and the Faculty of Vision suspended at least, if not intirely lost.

The Optic Nerves (in common with all the other Nerves in an animal Body) are liable to be obstructed from various Causes: For a further Explanation of which, I refer to what has been already said concerning Obstructions of the Auditory Nerves, p. 61. But amongst the various Causes assigned for these nervous Obstructions, I take the most common, as well as most probable, to be an undue and immoderate Distention of such Glands and Blood-vessels, as are adjacent, or lie contiguous to them. This being granted; it

it will be proper to form some Judgment concerning the specific Nature and Quality of the obstructing Humours, before we undertake to correct and dislodge them.

Previous or prior to the Obstructions of the Optic Nerves, we are to suppose Obstructions, or immoderate Distentions in such Glands and Blood-vessels as lie contiguous to them. Now, the supposed immoderate Distentions of the Glands or Blood-vessels may arise from viscous, glutinous Humours (such as are ordinarily form'd and engender'd by taking Cold) stagnating in the respective Glands and Vessels: Or otherwise, they may challenge a more remote and inveterate Root. As for Example: When foul, gross Humours, (whether from a scrophulous, scorbutic, or pocky Origin) which by reason of their Figure or Magnitude, (being denied Passage thro' the smaller Blood-vessels) form Obstructions that are hard to be removed.

Humours of the first Class (except they have been a long time formed, and have acquired a great Degree of Spissitude and Solidity) will easily be corrected and removed by Blisters, and Medicines of an attenuating, resolving Nature (proper Evacuations being premised): In such Case I advise as follows; *viz.* In the first place, take away oz. xv. of Blood, and apply Blisters between the Shoulders, and to the Insides of the Arms: — Then

Take opening Saffron of Iron, dr. vj. Gum Guaicum, and Rhubarb, of each dr. iij. Castor, dr. j. Conserve of Scurvygrass, oz. iij. Mix, and with q. s. of Syrup of the five opening Roots make an Electuary, Dose dr. ij. thrice a Day; drinking after, oz. iv. of the following Infusion:

Take Horse-radish Root, and Mustard-seed, oz. ij. Leaves of Eyebright, oz. j. Arum-root, dr. iv. Let them be beat all together into a gross Powder, and infuse warm, 12 Hours, in four Pints of old Hock; then strain for Use.

Take plain Spirits of Hartshorn, and Spirits of Sal Armoniac, of each

each dr. ij. Tincture of Castor, and Amber, of each dr. iij. Mix, to take 50 Drops, three or four times a Day, in a Draught of Tea, made with Leaves of Eyebright,

I can promise a great deal in favour of these Remedies, and therefore advise the Continuance of them, till the End is obtained.

But when the Disorder in question springs from a more stubborn and distant Root, we must then change our Style.—Such being the State of the Case, I prescribe as follows:—A Vein being first opened;

Take our Electuary of Quicksilver, dr. iv. for one Dose, to be taken every Night and Morning, when a Purge hath not been taken.

Take Pil. ex duobus, scr. ij. Resin of Jalap, gr. v. Euphorbium, gr. j ss. Oil of Savin, gtt. iv. to make five Pills, to be taken early in the Morning, every fourth or fifth Day.

Or,

Take Antimonial Æthiops, dr. iv. Gum Guaiacum, dr. iij. Extract of black Hellebore, dr. j ss. Euphorbium, gr. xij. Balsam of Peru q. s. to make a stiff Mass; from which are to be made 60 Pills, to be gilt; five of them to be taken every Night and Morning, instead of the fore-written Electuary.

Let there be taken once a Week a Dose of the purging Pills, unless the Body be opened more than was intended by the Use of the alterative Pills.

One or other of these Methods may, I believe, be depended on likewise: However, I will give one short History, which may serve at once to prove the Justice of my Reasoning upon a Case of this Nature, and the Prospect of Success from the above Methods.

Some few Years ago, I was called to a Woman under this unhappy Circumstance: I examined her Eyes very strictly, and found their outward Coats or Tunicles perfectly clear and free from Film; nor could I discover any opaque Substances floating in their Humours: Both Pupils presented themselves plain to View;

View; but then they appeared dead or dull, for want of animal Spirits to irradiate and enliven them. Examining her Body, I found her Skin covered all over with foul Eruptions; whence I judged and concluded, that she was over-run with a Scurvy, and that her Loss of Sight was intirely owing to some of the foul, gross, scorbutic Humours, stagnating in, and overstretching the Glands, and finer Blood-vessels, which lay contiguous to the Optic Nerves.

I first ordered copious Evacuation to be made by Bleeding, and afterwards my Electuary of Quick-silver, &c. with the purging Pills above described, every fourth or fifth Day. I likewise ordered a mercurial Ointment, but directed it to be used in so small Quantities, and at such Distances of Time, as not to give the least Appearance of a Salivation. By the Use of this Process the Patient happily recovered her Sight, and got a clean Skin into the Bargain.

Sometimes the Eyes shall be affected with a severe Smarting and Soreness, without any Defluxion, or other Appearance of a preternatural Moisture. To remedy such Disorders, I advise as follows; *viz.*

Take Milk of Sulphur, oz. j. Sperma Ceti, oz. j. Pulp of Cassia, and Conserve of Scurvygrass, of each oz. iij. Syrup of Violets, q. s. to make an Electuary, and to take the Quantity of a Walnut, three times a Day, drinking after, a large Draught of the following Decoction:

Take the five opening Roots, of each oz. j. Of Liquorice-root, oz. ij. Leaves of Coltsfoot, m. ij. Let them be boiled in q. s. of Water, to three Pints, when strained; to which add Syrup of Succory with Rhubarb, oz. iv. Sal Prunel. dr. iv. Mix.

N. B. *Riverius* is of Opinion, that the *Gutta serena* is most commonly produced from pituitous Humours sliding from the Brain into the Optic Nerves: But this Notion I cannot by any means subscribe to; nor indeed can I agree with him, that the Nerves are obstructed that way in paralytic Disorders; and I flatter myself,

myself, the Causes I have assigned will be judged much more reasonable and probable; and the Case I have described, is, I think, a sufficient Proof *à priori*, of the Justice of my Reasoning: Moreover, were the Optic or any other Nerves obstructed from an intrinsic Cause, (particularly that mentioned by *Riverius*) it would be next to impossible ever to remove them. That the obstructing Cause may be seated further back, (that is, nearer to the Source, Spring, and Origin of Sensation) I allow indeed. *Ex. gr.* The Cause may consist of a Tumor form'd *in ipso cerebro*; which Tumor, should it lie contiguous to the Roots or Origins of the Optic Nerves, might so compress them, as to hinder the Influx of animal Spirits to them, &c.

Strong Errhines may be used to Advantage in these Disorders, especially after the obstructing Humours have been in some measure resolved and prepared.—I recommend the following:

Take Flowers of the Lilies of the Valley, Leaves of Syriac Marum, and Marjoram, of each dr. ss. Asarabacca, scr. j. Make fine Powder for sneezing.

The *Suffitus* of Gum Frankincense, &c. described in the preceding Chapter of Deafness, p. 63. applied to the Crown of the Head, may perhaps contribute some Help.

The *Glaucoma* is a Discoloration of the crystalline Humour of the Eyes, into that Colour which the Word properly expresses; and it generally results from a preternatural Inspissation or Condensation of the said Humour. The Cure of this Distemper may be drawn from the Remedies directed for Suffusions and Cataracts, p. 71.

Should I descend to treat particularly of every Disease incident to the Eyes, I might extend this Chapter to the Sum of a Volume; therefore I chuse to decline it: However, I must observe by the way, that some one or other of the Methods I have laid down

down above, will be found useful and beneficial in most of those Disorders I omit to speak to; such as Disaffections in the vitreous and crySTALLINE Humours; Dilatations of the Pupils; *Albugo*; *Hypopyon*, or Collection of Pus under the *Cornea*; *Pblyctænis*; Ulcers in the *Adnata*, and *Cornea*; Cancers; *Fistula lacrymalis*, and the *Pterygium*, or *Unguis oculorum*.

The Use of *Spaw* Water will help a good deal in the Cure of these various Disorders of the Eyes; and when once a Cure is made, that, joined with cold Bathing, will be the most effectual Method to prevent a Relapse.

CHAP. XVI.

Of the QUINZY.

THE Situation and Symptoms of this Disease are so well known, that it would be Time lost to describe them here: Besides, 'tis not the Design of this Work to relate Things already written, and which are to be found every-where almost; I mean, in all Historical Writers of Diseases.

The Quinzy (as to its Nature) is inflammatory; and indeed, it is not only one of the most violent of that Tribe, but it is likewise the most dangerous, on account of its Situation.

If we consider the true Essence of this Disease, it will be found to consist in tough, viscous Humours; which (critically falling upon, and stagnating in the Glands and smaller Blood-vessels of the Larynx, Pharynx, Fauces, and adjacent Parts) cause violent Swelling, Tension, Inflammation, and Pain.

The mediate and immediate Causes of this Distemper have been sufficiently expressed already. The antecedent or primary Causes may be very various. As for Example; Whatsoever can or may superinduce

duce a preternatural Viscidity or Glutinosity in the Blood: Amongst these, the principal and most common are; frequent and severe Colds, and the excessive Use of ardent, spirituous Liquors: But besides these, the like ill Habit of Blood may be engendered by Errors and Abuses in any of the natural Accretions or Secretions; or from an Abuse in any of the Non-naturals. Sometimes a particular Dyscrasy or Distemperature in the Air contaminates the animal Fluids in this Sense: When such is the primary Cause, the mentioned Effect, *viz.* Quinzies, are then very rife, and are properly styled epidemical.

Sometimes this Disease is attended with so violent and precipitate a Flux of Humours, as to terminate soon in an Impostumation. In that Case the Discharge of the Matter gives immediate Ease to the Patient. This, indeed, is a perfect Cure, if one was always sure to arrive at it. But then Death peaches upon every Moment, that intercedes the Formation of such a Tumor, and the Time of its breaking. Some Persons have been actually suffocated under this Circumstance; and many others have only been preserved from it, by submitting to the last Remedy, Bronchotomy.

The proper Indications of Cure in this Disease are, First, Copious Evacuation, by Bleeding in the Foot; 2dly, Powerful Derivation, by Bathing the lower Parts of the Body in some warm, emollient Liquor: As also, by laxative Clysters, frequently repeated, in order to lessen the *Impetus*, or Action of the Blood upon the upper Region of the Body. 3dly, To attenuate and resolve the Viscidity of the Blood; and at the same time to relax, mollify, and widen the Diameters of the Blood-vessels; so that the Fluids may pass through them with greater Ease and Freedom. To answer and effect these Ends and Purposes, I recommend as follows; *viz.* First, draw Blood from the Vein under the Tongue, to oz. x. more

more or less; after that let the Semicupium be used, with warm Water, in which are boiled the Leaves of Marshmallow, Mallows, and Mercury.—Then

Take the emollient Decoction, oz. xij. Sea Salt, dr. iv. Linseed-oil, oz. ij. One Yolk of Egg. Mix for a Clyster, to be injected presently after the Semicupium has been used, and to be repeated every Night and Morning, or as often as need shall require.

Take Milk of Sulphur, Sperma Ceti, and white Sugar-candy, of each dr. ij. Saffron, dr. j. Russia Castor and Venetian Borax, of each dr. fs. Salt of Amber, gr. xvij. Mix for a Powder, to be divided into six Papers; one to be taken every fourth Hour; drinking after, oz. iv. of the following Mixture.

Take Leaves of Coltsfoot, true Maiden-hair, and wild Poppy-flowers, of each m. j. The five opening Roots, of each oz. j. Let them be boiled in q. f. of Water to two Pints, when strained; to which add, Linseed-oil, oz. vj. Syrup of Violets, oz. iij. Spirit of Sal Armoniac, 150 Drops. Mix.

Take a strong pectoral Decoction; in a Pint of which let be boiled Horse-radish-root and Mustard-feed, of each oz. fs. Oxymel of Squills, oz. iij. Salt of many Virtues, dr. iij. Mix for a Gargle, to wash the Mouth often with it warm; also let there be some of it injected into the *Fauces* thro' a Syringe often, with a greater Force.

If the Inflammation, Tumefaction, &c. rise so high as to threaten Suffocation, have immediate recourse to Blisters; which may be applied to the Neck, Arms, and Legs. By Blisters (as 'tis well known) the viscid, stagnant Humours are not only powerfully attenuated and resolved, but plentifully drawn off and discharged likewise. Or, in place of the foregoing,

Take white Sugar-candy in fine Powder, and Sperma Ceti, of each dr. iij. Linseed-oil and plain Oxymel, of each oz. iv. Oxymel of Squills, oz. ij. Mix for a Linctus; of which take a Spoonful every two Hours, drinking after it a Draught of the following Decoction, warm.

Take Decoction, as for Syrup of Marshmallows, lb. ij. Syrup of Violets, oz. iv. Volatile Sal armoniac, dr. j. Mix.

Some Constitutions are very much addicted to this Disease, upon every Cold they catch, or every Excess they commit. To such I advise the Use of *Sparw* Water, Riding, and cold Bathing, so soon as they are perfectly recovered from a Fit; which will be the surest Method to prevent a Relapse.

N.B. Besides Bleeding under the Tongue, the Operation ought likewise to be performed in the Foot or Arm, (since a sufficient Quantity of Blood is scarce to be got from the *Ranula*) and to be repeated as often as Occasion shall require.

C H A P. XVII.

Of a SORE THROAT *and* HOARSENESS.

A Sore Throat is, generally speaking, caused by crude, raw Humours, obstructing in, and overstretching the Glands of the Throat; and sometimes the fine, capillary Blood-vessels are likewise affected: Besides this most probable and frequent Cause, violent Exercise, and immoderate drinking of spirituous Liquors, may sometimes, doubtless, lay Claim to it, as their legitimate Offspring.

Thus the mediate and immediate Causes of this Disorder are already specified. As to the antecedent or remote Cause, it, generally speaking, consists in catching Cold, or any casual Retention of perspirable Matter; which will sometimes happen (and not frequently) from a chill, foggy Air. Upon this Supposition, the Intentions of Cure are, first, either to attenuate, resolve, and correct; or, to digest and concoct the morbid Humours: And lastly, to expel or discharge them. To answer these Ends, I prescribe thus; *viz.*

Take

Take Venice-treacle, scrup. iv. Saffron and Gum Guaiacum, of each gr. xv. Volatile Salt of Hartshorn, gr. x. Balsam of *Pertu*, gtt. x. Make a Bolus. To be taken every Night, so long as Need.

Take pectoral Decoction, a Pint; in which let be boil'd oz. ss. of the Flowers of wild Poppies. Syrup of Elder, oz. iv. Mix. To take oz. vj. warm, every Night, after the fore-written Bolus.

Take Decoction of Sena, oz. iv. Choice Manna, and cold-drawn Linseed-oil, of each oz. j. The Yolk of an Egg. To make a Potion. To be taken early in the Morning, every third Day.

But sometimes a sore Throat is attended with Ulcerations: And then we must suspect a more remote and stubborn Cause; such as a scorbutic, scrophulous, or pocky *Substratum*. When such is the State of the Case, the Cure of this particular Symptom must be consider'd in the Cure of the capital Disease from whence it results.

The Hoarseness (a Circumstance which frequently accompanies a sore Throat) is produc'd from the same Kind of Humours, only differently dispos'd; and, perhaps, may extend themselves further, and deeper in the Parts. It is evident here, I think, to Demonstration, that the *Nervi vociferantes* are so compress'd and obstructed, as not to admit a free Influx of animal Spirits: And it is equally demonstrable, that they are so compress'd from the Over-distention of such Glands (and, perhaps, Blood-vessels too) as lie upon them, or contiguous to them.

This Disease then (as to its Nature) is an Obstruction, or undue Compression, of certain capital Nerves; in consequence of which, the Sensory (which depends on the supposed Nerves) is either partially or totally eclipsed or deprived. Its Essence consists in a Proflux of crude, serous Humours, which (being thrust forcibly on the Part or Parts) distends their respective Glands, &c. beyond their due Dimensions.

The Indications of Cure, here, are, to attenuate and resolve the stagnant Humours; and, at the same time, to relax and irritate the obstructed, distended Glands, &c. so as to cause them either to repel or expel their superfluous Contents. To this End,

Take Milk of Sulphur, and Mummy prepar'd, of each dr. fs. Saffron, scrup. ij. Volatile Salt of Hartshorn, gr. xviii. Best Castor, gr. x. *Lucatellis's* Balsam, q. f. to make two Bolus's: One of which is to be taken at Night going to Rest, the other early in the Morning; drinking after it lb. fs. of the following Apozem warm. To be continued daily, so long as Need.

Take Root of Scorzonera, oz. ij. Of Grass and Asparagus, of each oz. j fs. Of Horfe-radish, and Mustard-seed a little bruised, of each dr. vj. Wild Poppy-flowers, m. j. Boil in a sufficient Quantity of Water, to lb. ij. when strain'd. To which add Syrup of Elder, oz. iij. Tincture of Amber, dr. iij. Mix, and give it.

Plaisters, or Cataplasms, of an irritating, resolvent Nature, do great Service, apply'd quite from Ear to Ear, either for this Complaint, or a Soreness.

If the Patient should lose twelve Ounces of Blood, and take the Linctus and Apozem, describ'd in the Case of a *Quinzy*, p. 81. for the Space of two or three Days before he begins with the above Method, it will do very well.



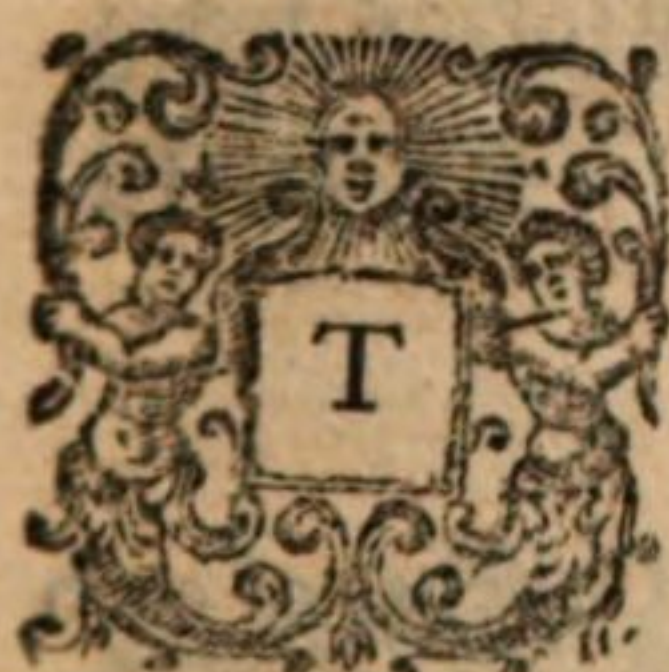


B O O K II.

Of the Diseases of the BREAST, and LOWER BELLY.

C H A P. I.

Of a CATARRH, and COUGH.



THIS Disease (in its Nature) is no other than a Defluxion; that is, a Distillation of raw, crude Rheum, which falling from the Head upon the *Aspera Arteria*, and thence passing into the *Trachea*, excites frequent and violent Coughing. The above Description comprehends and expresses the mediate and immediate Causes. As to the remote, or original Cause: Sometimes the Disorder in question springs from a sudden Retention of perspirable Matter (which is the first Effect, and real Essence of every Cold a Person takes); and sometimes, again, it proceeds from an habitual Contraction or Constipation of the excretory Pores of the Skin. And whichsoever of these is in Fault, in proportion as they are in Time and Degree, respectively, the Symptoms arising from them will be more or less violent, and difficult of Cure.

But, from whichever of the mention'd Causes a *Catarrh* may arise, *viz.* whether from an accidental, or an habitual Stoppage of the excretory Pores; the Indications of Cure will always be uniform, and the same; *viz.* The Indications are, 1st, To cleanse and open the obstructed Pores, and restore a free Perspiration. 2^{dly}, To digest, concoct, and evacuate the redundant crude Humours. 3^{dly}, and lastly, To contract, and restore to their natural State, those Glands which are distended and weakned, by the critical Profusion of the morbid Humours upon them.

Some reputed Authors (especially *Riverius*) pretend to affirm, that the proper Fewel of this Disease is first hoarded up or deposited in the Ventricles of the Brain: That from thence it distils, through the *Infundibulum*, to the pituitary Gland; and from thence is secreted, or discharged, through the Palate, to the Parts above mentioned.

To answer the first Intention, (Bleeding being premised) I recommend the Use of natural hot, sulphureous Baths; which may conduce much, As to Internals,

Take Milk of Sulphur, oz. j. Best Rhubarb, and Cubebs, of each dr. iij. Gum Styrax and Myrrh, of each dr. j ss. Candy'd Elecampane-root, oz. iij. Beat them well in a marble Mortar, adding by degrees Syrup of Poppy-heads, q. s. to make an Electuary. Take the Quantity of a Chesnut three times a Day, drinking after it a large Draught of the following Decoction, warm:

Take Decoction as for the Syrup of Marshmallows, (with Eryngo-root, Sarsaparilla, and China, of each oz. j. boil'd in it) Pints ij. When strain'd, add Syrup of Balsam, oz. iv. Mix, and give it.

Take the compound Pill of Hounds-tongue, from gr. x. to xv. Volatile Sal Armoniac, gr. viij. Balsam of Gilead, gutt. x. Powder of Olibanum, q. s. to make three Pills. To be taken every Night, going to Bed.

When

When the two first Intentions are answered, and the Symptoms are somewhat abated, proceed as follows; *viz.*

Take Filings of Iron, dr. vj. White Sugar-candy, dr. iv. Let them be rubb'd together into a subtle Powder: To which add Species of Diambre, dr. iij. Gum Olibanum and Mastich, of each dr. j ss. Candy'd Elecampane-root, oz. ij. Balsam of Gilead, scrup. ij. Syrup of Balsam, q. s. to make an Electuary, whose Dose is dr. ij. three times a Day; drinking after, a Draught of strong Decoction of Lignum Vitæ.

Another :

Take Jesuits-bark in fine Powder, oz. ij. Mastich and Olibanum powder'd, of each dr. ij. Mix well, and then add *Mynsicht's* Tincture of Steel, dr. vj. Let these be rubb'd well together into a blackish Powder; to which mix Conserve of Elecampane-root, oz. ij. Syrup of the same, q. s. to make a soft Electuary. Of which let the Quantity of a Chesnut be taken three times a Day.

By a regular and due Use of either of the above Methods, this Disease (I dare promise) will be happily and speedily cured, and all its ill Consequences prevented.

Of a dry, husky COUGH.

THIS Sort of Cough is (in Nature and Essence) quite opposite to the former. It is caus'd by tough, viscous Matter, or Humours, stuffing and distending the Glands and Vessels of the *Bronchia*, and, perhaps, the Vesicles of the Lungs.

When such Obstructions, and undue Distentions, are formed in the Glands, Vessels, and Vesicles above-mentioned, 'tis easy to discern that a Cough must necessarily ensue. For, first, by the continual Motion of the Lungs, on the one hand, and the incessant Action and Pressure of the Fluids, on the other, some small Portions of the supposed viscid Matter will be continually forcing out into the Cavities, either of

the Lungs or *Bronchia*, and so excite Coughing. Indeed, the very Weight of such Matter lying incumbent on the Vesicles of the Lungs, is enough to stir up a Cough.

These Sort of Coughs (in common with a *Catarrh*) claim the same original Parent, *viz.* taking of Cold. But then we must suppose the Air, productive of dry Coughs, to be imbued with some noxious Quality, such as a redundant volatile Nitre: Or even a Surcharge of more fix'd, and genuine nitrous Particles, in the Air we respire, is sufficient to produce this Change on our Fluids. To make the Reasonableness and Justice of this Supposition appear, we need only allude to some common Experiments made on the *Serum* of human Blood: *Ex. gr.* Take a Quantity of Blood from a Person in Health; let it stand till the Mass or *Crassamentum* separates, and leaves the Serum perfectly clear: Then pour off the Serum; into which instil or inject some Spirit of Nitre, and the Mixture will become a *Coagulum*; which will be more or less dense and viscid, according to the Quantity of the Spirit that is incorporated with it. And from the plain and visible Appearances that present upon such-like Experiments, I think we may reasonably conclude, that the first and most remote Cause of inflammatory Diseases (such as Quinzies, Pleurifies, Peripneumonies, &c. especially when they are epidemical) consist chiefly in a predominant subtile, or volatile Nitre in the Air.

The Indications of Cure are, to attenuate, lubricate, and evacuate. By Attenuation, the Humours will be prepared and fitted to revert into the Blood by Circulation; or else will be dispos'd to pass off more easily into the Cavities of the respective Parts. By Lubrication, the same Purposes will be assisted likewise; and, at the same time, the Parts will be sheath'd and defended against the Irritation of the morbid Matter. Evacuations, necessary in these Disorders,

orders, may be of various Kinds: As, 1st, Bleeding; in order to deplete and lessen the *Momentum*, and Pressure of the Fluid upon the Parts affected. 2^{dly}, Gentle Sudorifics; by which the obstructed Pores may be opened, and the morbid Matter eliminated that way. 3^{dly}, Expectoration. Or, lastly, soft, oily Cathartics.

To answer these Ends, (some Blood being first taken away)

Take Lac Sulphur, and Sperma Ceti, of each dr. iij. Russia Castor, and volatile Sal Armoniac, of each dr. j. *Lucatellis's* Balsam, oz. ij. Oxymel of Squills, q. s. to make an Electuary: Of which take the Quantity of a Nutmeg, every six Hours; drinking after it a large Draught of the following Apozem, warm:

Take fat Figs, oz. iv. Roots of Vipers-grass, and common Grass, of each oz. ij. Leaves of Colts-foot, and true Maiden-hair, of each m. ij. Fresh Roots of Marshmallow, and Liquorice, of each oz. j. Let them be boil'd in q. s. of Water to two Pints, when strain'd; in which dissolve white Sugar-candy, oz. iv. Manna, oz. ij. Mix.

If an early and copious Expectoration shews that Nature inclines to discharge the morbid Matter that way, then all Cathartics would be improper; and even the *Manna* should be left out of the Apozem. But, otherwise, the following Cathartic will be very proper and useful:

Take *Gereon's* Decoction of Sena, oz. iv. choice Manna, and cold-drawn Linseed-oil, of each oz. j. Yolk of a new-laid Egg. Mix for a Potion. To be taken early in the Morning, every third Day.

The excretory Pores of the Skin will be opened, and Sweating be sufficiently promoted, (in case no other Discharge precedes and predominates) by the Use of the Electuary and Apozem: Therefore 'tis unnecessary to order any thing particularly on that account. But if Expectoration should appear to be the sole Aim and Effort of Nature; in place of the above,

above, the Linctus and Apozem, describ'd in the Chapter of a *Quinzy*, p. 81. may be us'd ; yet to better Advantage.

When the incumbent Humours are once removed, and the Cough is considerably abated, the Glands, Vessels and Vesicles, which were affected and overstretch'd, may be scour'd, and restor'd to a due State of Contraction, by the following Electuary :

Take Filings of Iron, dr. vj. Rhubarb, dr. iij. Powder of Arum-root, dr. j ss. Vitriol of Steel, scr. ij. Candied Ginger-root, oz. iij. Syrup of the same, q. s. to make an Electuary ; to take the Quantity of a Chestnut every Morning, and at four o'Clock in the Afternoon, drinking after, half a Pint of *Spaw* Water.

By this means (as above observed) the Parts will be duly fortified ; which otherwise (remaining lax and weak after a Cure is performed) are subject to a fresh Inundation, upon the least Cold a Person takes.

C H A P. II.

Of the ASTHMA, *or* PHTHISIC.

AN Asthma, and a Phthific, are synonymous Terms, or two Words to express the same Thing.

N. B. Be it observed, that I have coupled the Word Phthific with the Asthma, in Conformity with the common Sense, and Expression of the Vulgar ; for with them a Person who is asthmatical (and consequently short-breathed) is always said to be phthificky.

The Asthma is by some divided into two Kinds, *viz.* The nervous, and the humoural : However, I cannot

cannot allow that Distinction to be very just ; because what they call a nervous Asthma, is not an essential, but a symptomatical Asthma only. It is a Circumstance indeed, that sometimes attends hysterical Women ; and when so, it is properly an hysterical Symptom, and should be treated accordingly : But whenever such a Thing happens, (let People call it what they please) I believe the fetid Gums, and volatile Salts, (both inwardly taken, and outwardly applied to the Nose to smell at) will be found the most speedy and effectual Remedy : For the Indication of Cure in such Cases is barely this ; *viz.* Either to force or reclaim the animal Spirits to their proper Centre and Source ; and then to instruct them in their Duty, and keep them strict in the Performance of it.

As to a true, genuine, essential Asthma, it may depend on various Causes : As, first, It may result immediately from Errors or Distemperatures, either in our Solids, or our Fluids ; For, suppose we that the constituent Fibres, &c. of the *Bronchia*, and the arterial Vessels of the Lungs, are too rigid, tense, and overbraced on the one hand ; or too much relaxed and widened on the other ; they may, under either Circumstance, produce the Disease in question. It may perhaps seem a Paradox to the Undiscerning, that those opposite distemper'd Conditions of the Solids should lead to the same Effects : But however, that those Things may happen, is to be demonstrated. *Ex. gr.* Let us suppose, that the whole Bulk of the pulmonary Arteries are grown too rigid, tense, and contracted ; 'tis plain, I think, that the Blood which is incumbent on those Arteries, and destined to pass through them, must meet with a proportionable Resistance ; the necessary Consequence of which will be Oppression and Difficulty of Breathing : — But if, on the other hand, the supposed Arteries of the Lungs are either totally or partially weakened, and their Diameters widened beyond their
due

due Dimensions; in that Circumstance ('tis true) the Blood will easily tumble into the over-distended Vessels: But then it will meet with a proportionable Difficulty to pass further; for when any one Part of an elastic, conical Tube or Canal is over-stretched and widened, the Part immediately depending on it will probably be over-narrowed and contracted. But besides that, the elastic Force of the over-stretched Vessels will be weakened and impaired; and consequently they will be rendered unable to propel the Blood forward, with the due and necessary Velocity; whence Oppression and Difficulty of Breathing will arise. But suppose we again, that some or all the arterial Vessels of the Lungs were totally and uniformly weaken'd and over-distended, from one End to the other, the Effect would probably be the same, or nearly so: For, first, They would under such a Distemperature easily give way to the influent Blood, and become over-stretch'd and bagg'd with it: But what is then the Consequence? Why, in proportion as those or any other Arteries are over-stretched and distended, so much will they lose of their Spring and Elasticity: Moreover, the arterial Vessels under such a State would infallibly be too narrow and contracted at their Terminations or *Anastomoses*; and consequently, the Blood's Progression or Passage from the Arteries into the Veins, would be as well obstructed as impaired.

When a Person's Blood is grown too thick, viscid, or fizy, it will very probably in that Case (as it often does in Fact) move too lazily and slowly through the Lungs, Diaphragm, and other Viscera; and consequently must tend to produce a preternatural Weight, Oppression, and a Difficulty of Breathing.

Furthermore, this Disease depends much upon the external Air which we live and breath in, and is greatly affected by it; that is, This Disease pre-existing, may be either heightened and aggravated, or mitigated

mitigated and asswaged by it ; for as the Air is more pure, rare, and light ; or more heavy, gross, and dense ; so the Disease will be found to ebb or flow accordingly, especially if it depends on Errors and Distemperatures in our Fluids. Indeed, the Usefulness and Necessity of Air, to the Welfare and Existence of animal Bodies, is most egregiously specified by the Changes it produces in this Disorder : For we see People affected with the Phthific, (a Disease so nearly allied to the Asthma as scarce to be separated from it, even in Idea) who can't live in large, populous Cities, especially in Winter-time, when the Air is either cold, foul, or dense, and perhaps all three. But let such Persons take Horse, a Coach, or if they please, walk on Foot into the Country ; they perceive a visible Amendment, in proportion as they remove further from the City. Indeed, the Air in an open, champain Country, may be as cold, or colder than it is at the same time in great Cities which lie in the same Latitude or Climate : But then it will be more pure and free from those gross, foul, heterogeneous Particles, with which the Air in Cities is clogg'd and incumber'd : And the best Air in the World, in proportion as it is loaded with gross, foul, heterogeneous Particles, will not only become dense and unfit for the Office of Respiration ; but its Elasticity or Spring will be weaken'd likewise ; so that it becomes offensive or noxious in a double Sense : For, first, Air thus distemper'd will not pass with due Velocity through the Wind-pipe into the Lungs ; and consequently the Lungs cannot be inflated with that Vigour, and to that Extent, which is necessary. 2dly, That Air which is mixed with the Fluid in the Blood-vessels (sympathizing with the exterior Air) will be weakened in its elastic Force, and consequently will be unable to actuate, attenuate, and rarefy the Blood so much as it should do.

In

In laying down therefore the Indications, as well as in the Choice of our Remedies for the Cure of this Disease, we must have a particular Regard to the Cause from whence it (mediately) springs. If it results from too tense, rigid and contracted a State of the arterial Vessels, and other Solids, in such a Case, Oils, with other emollient, relaxing Medicines, will probably answer. *Ex. gr.*

Take white Sugar-candy in Powder, and Sperma Ceti, of each dr. iv. Mix them well, and after add by Degrees, and alternately, cold-drawn Linseed-oil, and Syrup of Marshmallows, of each oz. iv. Make a Linctus; give two Spoonfuls for a Dose every four Hours; drinking after them lb. ss. of the following Decoction, warm

Take Figs, oz. vj. Fresh Root of Marshmallow and Asparagus, of each oz. ij. Leaves of Coltsfoot, m. ij. Mix and boil in q. s. of Water to two Pints, when strained.

Take Pulp of Cassia newly made, dr. iv. Milk of Sulphur, scr. ij. Oil of Aniseed, xj Drops. Make a Bolus, to be taken every second or third Morning.

All natural hot, sulphureous Waters, either inwardly or outwardly used, will be found of great Use in these Cases.

If an Asthma is judged to arise from the opposite Condition of the Solids; then opposite Indications present, and ought to be pursued. In this Case, all such Things as stimulate, irritate, invigorate and retract, are required. To answer which Purposes, I direct as follows. In the first place, take away oz. xij. of Blood.—Then

Take Rust of Iron in very fine Powder, dr. vj. Species of Diambre without Perfumes, and Powder of Galengal, of each dr. iij. Powder of Arum-root, and Cubebs, of each dr. j ss. Conserve of Roman Wormwood, and candied Ginger-root, of each oz. ij. Syrup of Ginger, q. s. to make an Electuary, of which take dr. iij. thrice a Day, at physical Hours, drinking after them half a Pint of Spaw Water.

Take *Mynsicht's* Tincture of Steel, and Tincture of Russia Castor,
of

of each dr. iv. Mix, and take sixty Dropsevery Morning at eleven a Clock, in a little Draught of Spring-water.

If it should appear to the accurate and skilful Physician, that the Disease proceeds from a tough, viscid State of the Fluids; upon that Supposition such Things as rarefy, resolve, and attenuate, claim Preference. *Ex. gr.*

Take Milk of Sulphur, dr. iij. Saffron and Flowers of Benjamin, of each dr. j. Strained Gum Ammoniacum and Sagapenum, of each dr. j ss. Balsam of Gilead, dr. j. Balsam of Peru, q. s. to make 100 Pills; five of which are to be taken every fifth or sixth Hour, drinking after, oz. iv. of the following Apozem:

Take the five opening Roots, of each oz. j. Let them be boiled in q. s. of Fenel-water to two Pints, when strained; to which add, Spirits of Sal Armoniac, 150 Drops; Viper-wine, oz. vj. Mix.

If the Obstinacy of this Disease should render it Proof against the Force of these Remedies; then Recourse must be had to our Electuary of Quicksilver, &c. (already prescribed upon other Occasions) and to be taken after the manner before-said.

When the mediate Cause and Essence of a Phthi- sic or Asthma is not absolutely determinable; the following may be used with no small Chance of Success:

Take Rust of Iron, very finely levigated, dr. vj. Species of Diam- bre, and choice Rhubarb, of each dr. iij. Russia Castor, and Flowers of Benjamin, of each scr. iv. Candied Elecampane- root, oz. iv. Syrup of the same, q. s. to make an Electuary; of which take the Quantity of a Chesnut, three times a Day, drinking after, a Draught or two of Tea, made of the follow- ing Ingredients:

Take the Leaves of Coltsfoot, white Horehound and Hyssop, of each m. j. Feverfew and Penny-royal, of each m. ss. Root of Florentine Orrice, oz. j. Arum-root, dr. iij. Let them all be cut very small, and mix'd.

C H A P. III.

Of the PLEURISY.

THIS Disease is, in its Nature, inflammatory ; and indeed it may justly merit to be styled the chief of that Tribe. It is generally attended with a most exquisite pungent Pain ; and when a Cough accompanies it, (as usual) 'tis almost intolerable.

Sometimes (though not always, as various Writers seem to imagine) it is accompanied with a Fever from the Time of its first Access ; and then it may properly be called a pleuritic Fever. Sometimes, again, the Fever comes on after the Disease has been formed, and subsisted several Days : And in such Case the Fever may be said to be symptomatical. At other Times a pleuritic Pain shall come upon a Fever, after this had commenced and subsisted several Days ; and then the Pain may be (strictly speaking) accounted symptomatical.

Sydenham insinuates, that a Fever always precedes the pleuritic Symptom ; but that afterwards the Fever is enhanced by those very Pains itself had given Birth to. 'Tis certain, indeed, that when pleuritic Pains, or any others of the inflammatory Kind, either come with, or upon a Fever, both the Fever and the Pains will increase each other mutually and reciprocally. But nevertheless, when I appeal to my own Observations on pleuritic Disorders, I cannot forbear thinking, that *Sydenham* is out in his Judgment, consider'd as general and universal.

The *Causa proxima*, or immediate Cause of this Disease, is always a Stagnation of Blood in the fine capillary Arteries of the Membrane, called the *Pleura*. The *Causa media*, or mediate Cause, is most commonly a viscid, fizy Habit of Blood ; as the Blood
drawn

drawn from Pleuritics does sufficiently instruct. Sometimes, indeed, this Disease may proceed from violent Exercise in hot Weather; from Excess in drinking of spirituous Liquors; or from hot, acrimonious Humours in the Blood: All which are very opposite to the first-mention'd Habit. Indeed, the mediate Cause, or Condition of Blood first assigned, actually does, (generally speaking) and either of the others possibly may, give Birth to any of the inflammatory Diseases. But the *Causa remota*, or first Cause, is whatsoever may pervert the natural State of the Blood, and render it vitious in any of the respects above-mentioned.

That frequent catching of Cold does often bring on a fizy, viscid State of Blood, is undeniable: And sometimes again their Effects may tend to the Acrimonious. For, that catching Cold, as it may happen in different Seasons of the Year, under different Circumstances of the Air, in different Degrees of Measure, or in different Constitutions, is capable of ingendering ill Humours, and Habits of various Kinds, is, I think, beyond all Contest or Dispute.

Excess, or Immoderation in the Use of spirituous Liquors, is very frequently (tho' often falsely) charg'd with being an immediate Accessory to the Production of this Disease. I acknowledge indeed, (as above) that this may (tho' rarely) sometimes happen: For, when the Blood of a Person is greatly heated and agitated, from such a Cause; it may rush violently and critically into the Arteries of the *Pleura*, and there (for want of a free Outlet) become stagnant, and produce the Disease in question. But this pernicious Practice is by much more frequently the mediate Cause of this and other inflammatory Diseases: For, when a Man is under a Debauch of this Sort, (being unattentive or incapable of all Care and Caution himself, and having no Servant or Friend to regard him, perhaps) he is more exposed to the Inclemen-

cies and Injuries of Weather than at other times. And as the Blood is more heated and agitated, and the excretory Pores more open at such times than at others; so he must necessarily be more subject to take Cold. Since then repeated Colds are, generally speaking, the first Cause or Origin of this Disease, the great Secret lies in preventing those Accidents: But of that, more, anon. The proper Indications of Cure consist, First, In Depletion and Derivation; 2^{dly}, In the Attenuation and Resolution of the Fluids; and 3^{dly}, In relaxing the Solids. To effect which Purposes; in the first place, take away oz. xij. or xv. of Blood, from the Foot or Arm, and repeat the Bleeding as often as there shall be Occasion.—Then

Take white Sugar-candy in Powder, and Sperma Ceti, of each dr. iij. Mix well, and add by little and little, Linseed-oil and Syrup of Marshmallows, of each oz. iv. Balsam of Peru, scr. ij. Make a Linctus; of which take oz. ij. every three Hours; drinking after it a Draught of the following Apozem, warm.

Take the five opening Roots, of each dr. v. Stone-horse Dung, lb. fs. Let them be infused in two Pints of Fenel-water, scalding hot, three Hours; then just let it boil, strain, and press it; to which add Syrup of Elder, oz. iv. Volatile Sal Armoniac, dr. j. Mix.

Another Method:

Take Gum Ammoniac, and white Sugar-candy, of each dr. iv. rub them together into a fine Powder; to which pour by degrees wild Poppy-water, oz. xij. Mix well, strain, and press it. To the pressed Liquor add volatile Sal Armoniac, scr. ij. Linseed-oil, and Syrup of wild Poppies, of each oz. iij. Mix and take four Spoonfuls every three Hours, shaking well the Bottle; and after every Dose let be drank a Draught of the above-prescribed Apozem.

Take Ointment of Marshmallows, oz. ij. Camphor, scr. iv. rubb'd with a few Drops of Oil of Almonds; Spirit of Sal Armoniac, dr. iv. Mix. With which embrocate the affected Parts with a warm Hand, and laying over Cummin-plaister, spread upon Leather.

If the Patient should be costive, an emollient Glyster may be injected ; and bathing the Feet and Legs in tepid Water, to derive or divert the *Impetus* of the Blood from the upper Regions of the Body.

But my Views are not limited and confined to one Process or two: And, as I abhor Multiplicity on the one hand ; so I would avoid Penury on the other. Therefore, as an Alternative, shall offer a third Method, which in some Cases may be found to excel those described above.

Take Milk of Sulphur, dr. iv. *Bates's* Pulv. Peptic. Mummy prepared, of each dr. ij. *Lucatell's* Balsam, oz. ij. Syrup of Marshmallows, q. s. to make an Electuary : Dose dr. ij. every three Hours; drinking after, oz. iv. of the following Apozem, warm.

Take Decoction as for the Syrup of Marshmallows, two Pints; Syrup of wild Poppies, oz. iv. Volatile Sal Armoniac, dr. j. Mix.

If the Disease should be so obstinate as to elude the Force of all these Remedies, (which I believe will very seldom happen) recourse must then be had to Blisters.

Great Encomiums are given by some, on the Use and Efficacy of *Millepedes*, or Wood-lice, in this Distemper. Accordingly, I have frequently experienced them in Pleurifies; and have purposely laid a good deal of Stress upon them, where the Mildness of the Case would allow of it (because no Physician, I think, ought to indulge and amuse himself in trying Practices, as the vulgar Saying is, where the Disease is both violent and dangerous); and must confess, I have not found them come up to the Praise ascribed to them.

Some Persons are extremely addicted to this Disease, and have very frequent Returns of it; even upon almost every Cold they catch. To such 'tis very proper to advise Methods for Preservation or Prevention.

vention. To this End, the Use of the following, with *Spaw* Water, will avail much:

Take Tops of Roman Wormwood, oz. j. Of lesser Centaury, and Roman Chamomile-flowers, of each oz. fs. Roots of Arum, Zedoary, and Calamus Aromaticus, of each dr. iij. Smaller Cardamum-seeds, and Species Diambre without Perfumes, of each dr. ij. Mix. To which pour boiling Water, lb. ij. Let it stand in a Vessel well shut, till grown cold; then strain and gently press; and to every Pint of the clear add Steel-wine, oz. ij. Tincture of Rhubarb, oz. j. Mix, and take oz. iv. every Morning, and at Four in the Afternoon.

Take Tincture of Hiera Picra, oz. iij fs. Steel-wine, dr. iij. Make a Potion: To be taken early in the Morning, twice a Week.

The *Spaw* Water is to be drank, during this Process, for common Drink.

C H A P. IV.

Of the PERIPNEUMONIA.

THIS Disease is, in Nature and Essence, the same as a Pleurisy; and, generally speaking, proceeds from the same Cause: But then it differs from it in Situation; and is more constantly attended with a Cough, and Difficulty of Breathing.

The curative Indications are much the same here as in the Pleurisy; only, that Expectoration is more particularly to be favour'd and promoted in this Case than that.

Blisters are eminently useful here; and, consequently, deserve to be strenuously recommended and inculcated. As to the rest; the Internals (for Externals have little or no Place here) prescrib'd in the Case of a Pleurisy, are applicable here, with a very small Variation or Addition.

Add to the Lambitive (prescribed before for the Pleurisy, p. 98.) Oxy-mel of Squills, dr. xij. To be taken as before-mentioned. Add also to the Infusion of Horse-dung, &c. Juice of Liquorice, cut thin, oz. j. and omit the Syrup of Elder. To be taken as before ordered.

Or otherwise,

Take white Sugar-candy finely powder'd, dr. vj. Sperma Ceti, dr. iv. Russia Castor, and Flowers of Benjamin, of each scrup. ij. Mix well, and add by little and little Linseed-oil, and Syrup of Marshmallows, of each oz. iv. Oxy-mel of Squills, dr. xij. Make a Linctus, the Dose whereof is two Spoonfuls, every third Hour, drinking after, a Draught of the following Apozem, warm :

Take Leaves of Colts-foot, m. ij. Marshmallow-root fresh, and Liquorice, of each oz. ij. Figs sliced, oz. iv. Let them be boil'd in q. f. of Water to two Pints, when strain'd: To which add plain Oxy-mel, oz. iij. Spirit of Sal Armoniac, one hundred and twenty Drops. Mix.

I have already mentioned the Usefulness of Blisters; by means of which, and the Remedies above described, the Physician's Hopes and Expectations will very seldom be disappointed.

Be it understood, that copious Depletions, by Bleeding, to take off or lessen the *Impetus* and Pressure of the Blood on the Part affected, are equally proper and necessary here, as in a Pleurisy. And this Operation must sometimes be repeated often, and at short Intervals.

CHAP. V.

Of the EMPYEMA.

BY the *Empyema* (though, in reality, the Meaning of the Word is more general and extensive) we understand an Abscess suppurated and broken, whose

Pus, or Matter, discharges itself into the Cavity of the *Thorax*.

This Disease is generally the Result of a Pleurisy, or a *Peripneumonia*; but more especially the latter. This Rupture, and Discharge of the morbid Matter into the Cavity of the *Thorax*, gives immediate Relief to the Pain and Difficulty of Breathing; and sometimes, too, the Fever recedes upon it. When it is succeeded by all these Benefits, it promises well, and then is often cured; except the Quantity of Pus is very great, or the Quality of it so bad as to render it soon putrid: And, in either of these Circumstances, it may give Cause to new Symptoms and Disorders.

The great Difficulty (as I apprehend) is how the Matter should find a Way to get out of the *Thorax* again? For want of which it will, undoubtedly, corrupt and putrefy, sooner or later. Some Writers imagine, that it may be resorb'd by the Lungs, as their Substance is very glandulous and porous. And if we could allow that, it would then be no hard Matter to assign a convenient Passage for it afterwards.

However, all other Means failing, the last Resort (and that Operation is neither very difficult nor dangerous) is a Puncture in the Side, commonly called the Operation of the *Empyema*. But, besides this, there yet remains something else to be done; that is, the Ulcer must be deterg'd, cleans'd, and heal'd. To answer which Purposes,

Take Lac Sulphur, dr. vj. Martial Diaphoretic Antimony, and white Amber prepar'd, of each dr. iij. Flowers of Benjamin, and Venetian Borax, of each scrup. ij. *Lucatelli's* Balsam, and Conserve of Hips, of each oz. j ss. Syrup of Succory, q. s. to make an Electuary: Of which take the Quantity of a Chesnut every six Hours, drinking after it a Glass of the following Apozem:

Take the five opening Roots, of each oz. j. Leaves of Colts-foot, of Scabious, Ground-ivy, Horehound, and spotted Lungwort, of each oz. ss. Boil them gently, in q. s. of Mum, to two Pints, when strain'd: To which add plain Oxymel, oz. ij. Mix.
To

To be continued for five or six Days, and after to use the following:

Take Syrup of Myrtles, oz. iv. Our Styptic Elixir (described in the End of this Book) oz. xij. Mix, and take one Spoonful twice a Day.

Take depurated Juice of Nettles, and of Plantain, of each oz. j ss. Syrup of Myrtles, oz. j. Sal Prunell, scrup. ii. Mix for a Draught. To be taken every Night, going to Bed.

The Diet should be cooling, soft, and mucilaginous; such as Sago, Milk, Rice, Gruel, Turneps, Potatoes, and the like. Of Meats, Veal and Chicken are to be preferred.

CHAP. VI.

Of CONSUMPTIONS.

CONSUMPTIONS were divided by the Ancients into two Kinds; viz. an Atrophy, or *Phthisis*; and an Ulcer of the Lungs. Some curious Moderns have subdivided again upon the Ancients, and have multiplied those two general Species into several particular ones: As for Example; the scorbutic Consumption, the scrophulous, the pocky, &c.

I look upon this Subdivision of the Moderns to be extremely necessary and proper; because the Epithet annex'd, specifies from what Origin it springs: And, be the Malady what it will, it is always expedient, that the Origin of the Disease should be discover'd (as near as possible) before we attempt a Cure.

I will begin with the *Atrophy*; as well because many more Subjects present of that Sort than of the other, as because that is always curable; or, at least, is never to be pronounced incurable.

An *Atrophy*, or *Phthisis*, is a gradual Wasting or Decay of the whole animal Frame; and that, sometimes,

times, under the Circumstances of a good Appetite, and the outward Appearances of a good Digestion. Sometimes this Wasting of the Body is very precipitate and hasty; and then it is, with us, vulgarly styled, a *galloping Consumption*. In truth, it is not a little to be wonder'd at, that a Person, under the Circumstance of a good Appetite, and plentiful Feeding, and that suffers no visible, preternatural Evacuations, (except Night-sweats, perhaps) should be so suddenly demolish'd, as we sometimes behold.

That Persons, under this Disease, have sometimes a good Appetite, and eat plentifully, is most certain. But, though no Signs of Indigestion appear, (such as Heaviness at Stomach, Sickness, Qualms, Ructus's, Flatulencies, &c.) yet I much suspect, that the Aliments pass into the Blood in an unprepar'd, indigested State; because, 'tis evident, they seem rather to feed the Disease, than to nourish the Body.

As this is a capital Disease, and one that hastens the Period of Life to great Numbers, so I will endeavour to discuss the Subject as minutely and accurately as possible. And,

First, Whatsoever may be the antecedent or remote Cause of this Disease, the Basis, or Essence of it, consists in ill Humours, formed or ingender'd in the Constitution; which morbid Humours seem, as it were, to grind it down, and wear it away; even under the advantageous Circumstances above-mention'd, of a good Appetite, and (for ought that appears to the contrary) a good Digestion too. But though the diseas'd Person does eat with a good Appetite, and seems to digest well, yet most certainly the Aliments must be deficient in point of Concoction. Or, otherwise, we must necessarily suppose, that the Aliments, when received into the Blood, and incorporated or mix'd intimately with it, are so wrought upon by the morbid Humours, as to be changed into their own specific Nature, and so join and co-operate with them,

to

to the Destruction of that very Frame which they were design'd to sustain and preserve. It must be a very necessary Point therefore, in the Cure of this Disease, to preserve or restore all the Accessories to a good and wholesome Nutrition. And when I come to treat of this Disease in its curative Part, I shall offer some Things upon the footing of a faithful and repeated Experience; which will sufficiently evince the Justice of my Reasoning, *à postérieure*.

The constituent Humours of this Disease (from whatever primeval Source or Origin they may spring, *viz.* whether from the scorbutic, scrophulous, strumous, or pocky; or even from repeated Catching of Cold, for that is sufficient, and often found to lay a Foundation) are undoubtedly retaining to the acrimonious Kind. This, I promise myself, will be judg'd a very reasonable and probable Conjecture: For 'tis scarce possible, that any other Genus, or Species of Humours, could so hastily and precipitately tear to pieces and destroy such robust Habits, as sometimes fall Victims to this Disease. However, though it is always a necessary and useful Point gain'd, That the Physician has form'd a right Judgment concerning the particular Genus of the morbid Humours which subtend the Disease; yet is it nevertheless proper, that he carry his Inquiries somewhat further: That he examine if any ill Habit preceded the Access of the Disease in question; and, if so, of what Kind it was; because, the same specific ill Humours, ultimately produc'd by different preceding ill Habits, may require different Applications of Cure. It is upon this Account that I so much applaud the nice Distinctions made by some modern Writers; and their subdividing upon the general Division of this Disease, made by the Antients.

I shall not set about to describe all the various Symptoms and Circumstances, that more or less accompany this Disease, in the Multitude of Subjects it
seizes

seizes (that being foreign to my Purpose and Design); but shall only remark, in general Terms, that it is mostly attended with a hectic Fever, with spontaneous or colliquative Sweats, (which come on about two, three, or four o'Clock in the Morning) and a crude, unconcocted Urine. Indeed, when the Disease is far advanc'd, the Urine has generally a fetid Smell; and exhibits, to our Examinations, all the Appearances of a general Liquefaction or Dissolution. But when things are so circumstanced, the Disease, and the Life of the Patient, are both near at an End.

The Nature of this Disease is sufficiently express'd by the common Name *Consumption*; which implies a wasting or consuming of the human Fabric, by the continual Erosion of acrid or corrosive Humours. In the suppos'd morbid Humours consists, not only the mediate Cause, but likewise the true and real Essence of the Disease. And, for its antecedent or original Causes, they may be of various Kinds, as specified above.

The Intentions or Indications of Cure are, 1st, Either to correct and alter, or to digest and concoct the morbid Humours. 2^{dly}, To obtund, sheath, and lessen their Irritation, by Things of a soft, benign, balsamic Nature. 3^{dly}, To open Obstructions, (if any there be) and to eliminate the Humours, (first alter'd and prepar'd as above) either by insensible Perspiration, or Urine; or, perhaps, by soft, gentle Cathartics. 4^{thly}, The Faculties of Digestion and Concoction are to be strengthened and confirmed.

If the diseas'd Person is afflicted with Pains in his Side and Hypochondria, or with a Weight or Heaviness about the Region of the Mesentery (evident Signs of Obstruction); and especially, if the Disease claims any of the ill Habits above-mention'd, as its Parent; in that Case, I advise as follows; *viz.*

Take Antimonial *Æthiops*, dr. iv. Gum Guaiacum and Rhubarb,
of each dr. ij. Conserve of Scurvygrass, oz. ij. Of Mint,
oz. j.

oz. j. Make an Electuary; of which take dr. ij. for a Dose, three times a Day, drinking after, six Ounces of the following Apozem:

Take Ernygo-root candy'd, oz. ij. Elecampane candy'd, oz. j. Sarsaparilla and China, of each oz. j ss. Shavings of Hartshorn, and Ivory, of each oz. ss. Let them be boil'd in q. s. of Water to oz. xl. when strain'd. To which add the Juice of Scurvy-grass, and Brooklime, with the Juice of Seville-oranges depurated, of each oz. viij. Mix, and give it.

Another Method:

Take Cinnabar of Antimony, dr. iv. *Poterius's* Antihectic, Gum Guaiacum, and Rhubarb, of each dr. ij. Myrrh, dr. j. Conserve of Scurvygrass, oz. ij. Conserve of Mint, oz. j. Mix for an Electuary, whose Dose is the Quantity of a Nutmeg, three times a Day; drinking after, a Draught of the afore-prescrib'd Decoction.

One or other of the above will be good for this Disease, if founded on a scrophulous or a scorbutic Basis. But if the morbid Humours, and the Obstructions dependent on them, should be so fix'd and obstinate, as to elude the Force of both one and the other; in such Case, I recommend the following; viz.

Take our Electuary of Quicksilver, dr. iij. or iv. for one Dose. To be taken every Night going to Bed, and every Morning in Bed, sleeping after it. Only to omit the Morning-dose, when this following is to be taken:

Take *Gereon's* Decoction of Sena, oz. iv. with a Drachm of Rhubarb boil'd in it. Manna, dr. vj. Elixir Salutis, dr. iv. Mix for a Potion. To be taken early in the Morning, every fourth Day.

The Method last describ'd, is particularly calculated for this Disease, as it may result from a pocky Origin. But if any Appearance of a *Ptyalismus*, or Swelling of the Gums, &c. should present, we must intermit for a Day or two, till the same recede, or are carry'd off by Cathartics, and other convenient Medicines.

After

After such of these Methods as the skilful Physician shall make Choice of, have been duly used and continued, (*viz.* for the Space of four or six Weeks) by means of which the morbid Humours will probably be corrected, and the Obstructions removed; I then advise to proceed with the following: By means of which the Errors of Concoction will be corrected, and the Faculty be restor'd, and the Secretions (particularly that of Transpiration) be regulated and strengthened.

Take Jesuits-bark in subtil Powder, oz. ij. Rust of Iron finely levigated, dr. vj. Rhubarb, dr. iij. Conserve of Mint, oz. ij. Syrup of Poppy-heads, q. s. to make an Electuary. Of which take dr. iij. for a Dose, thrice a Day; drinking after, five Spoonfuls of the Juice of Scurvygrafs, with Seville-oranges depurated.

If the Cough increases, let there be taken every Night, going to Rest, Pills of Styrax, and Balsam of Tolu, of each gr. viij. To be made into five Pills, with q. s. of Balsam of Gilead.

By an Electuary of the above Kind (where *the Bark, Steel, and Rhubarb*, have been the Basis, and after some other previous Method) I have restor'd several Persons from very deep Decays: Which, I think, sufficiently testifies, that Want of Concoction is almost an inseparable Companion of the Disease.

When this Disease proceeds from a recent and simple Origin, (such, for Example, as repeated Colds) the Electuary last describ'd may do, without any thing else.

We should not omit to commemorate the Usefulness and Efficacy of Vipers, in some Diseases of this Sort; especially, such as have arisen from a scorbutic Origin, or from repeated Colds.

During the Time that the above Methods, or any of them, are in Use and Practice, it would be proper to caution and direct the Patient, with regard to his Diet; which should consist chiefly of Turneps, dry-bak'd Biscuits, Raisins, Garden-snails, and Milk,
and

and such-like. Some have recommended Oysters, as an excellent Food in these Distempers: And, indeed, I cannot help thinking very well of them.

As to the whole Tribe of *Testacea*, and other Absorbents, (in common Practice for this Disease, under the Notion of Sweeteners) I must acknowledge to have made Experiment of them sometimes: But, really, I can say nothing in Commendation of them. But Asses-milk, a well-chosen Country-air, and Riding on Horseback, are sometimes found of great Use, and are always proper.

I hope the Definition I have given of this Disease, and the Opinion I have deliver'd of it, as to its various Origins or first Causes, its true Nature and Essence, and the Indications of its Cure, will be thought rational and just. And as to the Methods of Cure I have laid down, (with such Additions, Omissions, or other Alterations, as the skilful Physician shall judge proper and convenient) I promise myself, the Patient's Hopes, and the Physician's Wishes, will, generally speaking, be answer'd.

Of an ULCER of the LUNGS.

THIS Sort of Consumption, when or wheresoever it appears, is (tacitly, at least) pronounced by the Physician incurable. Therefore, all the Help and Comfort we can give, is to palliate or alleviate the Symptoms; to retard the Waste, as much as possible; to render the remaining Portion of Life as easy, and to prolong it to the utmost of our Power.

I shall not give myself the Trouble to quote the various Reasons assign'd, to prove this Disease incurable; nor shall I enter into any Inquiry concerning their Validity. However, if we may credit the frequent Accounts we have of Persons wounded in the Lungs, who have not only survived, but perfectly recover'd from the Accident; it would seem, that
the

the Fate denounc'd upon the Disease in question, is to be disputed, and even suspected. And if such Suspicions are just, and true in Fact; why, then, it follows, That some, who die of this Sort of Consumption, don't so properly die of the Disease, as of the Doctor, for want of Skill and Care to cure them.

There is some Difference to be suppos'd, however, betwixt a Wound in the Lungs, made with an Instrument, (which comes from without, and has nothing to do with the Blood, except the little that is spilt by it) and an Ulcer (which is still a Wound) from an inward Cause: For as the latter is caus'd and brought on by an ill Habit of Blood, (generally speaking, at least) so it will be supported and continued by the same; which is not the Case in Wounds made with Instruments. Moreover, the Blood which issues from green Wounds, is generally dispos'd to coagulate; and so may agglutinate and heal up the Wound, from whence it flows, itself, without any other Help: Whereas an Ulcer, caus'd and fed by purulent Matter, has not that Chance; even though the ill Habit that produc'd it, was perfectly corrected or extirpated.

This Kind, or Species of Consumption, (like the other) may challenge various Origins, or first Causes. Indeed, it may lay Claim to any of those ascrib'd to an Atrophy. And, besides, it has some others peculiar to itself: *Ex. gr.* Violent Exercise, or an extravagant Debauch of ardent spirituous Liquors, may impel the Blood with such Violence on the Lungs, as to cause an Inflammation, Abscess, and Ulceration. Or, otherwise, the Surcharge of Humours, produc'd and accumulated by a recent Cold, may be critically deposited or protruded on the Lungs, with such Force and Violence, as to produce the same Effect. Nay, a single Surfeit has often laid the Foundation of this Disease; as, indeed, it has of many others.

But,

But, whatsoever is suppos'd to be the Origin or first Cause of the Disease in question, (which, nevertheless, should always be had regard to) the utmost Address, Care, and Diligence, are requir'd from the Physician, concerning the Management of the Ulcer.

I shall first inquire into the Basis of the Distemper, or ill Habit from whence it proceeds. If it arises from Plenitude, or a Surcharge of Humours, caused and ingender'd by recent Colds; then Depletion, effected by proper Instruments, will be (so far, at least) a Cure. But, unhappily, the old Axiom (*sublatâ causâ, tollitur effectus*) won't hold good here; as, indeed, 'tis fallible, in many other Instances. Upon this Supposition, I recommend as follows:

In the first Place, take away twelve Ounces of Blood from the Foot. Then,

Take Manna, oz. j ss. Rhubarb powder'd, scrup. ij. Decoction of Tamarinds, oz. iij. Oil of Aniseed, gtt. v. Make a Potion: To be taken early in the Morning, every third Day.

Take Rob of Juniper, and Elder, of each oz. ij. Milk of Sulphur, oz. j. Flowers of Benjamin, dr. ij. Flowers of Lapis Hæmatis, dr. j. Syrup of the Five opening Roots, q. s. to make an Electuary: Of which take the Quantity of a smallish Nutmeg, three times a Day, (upon those Days when free from Purging) drinking after, a large Draught of the following Decoction:

Take Sarsaparilla-root, China, and Elecampane candy'd, of each oz. j. Eryngo-root candy'd, oz. ij. Florentine Orris, oz. ss. Leaves of Ground-ivy, m. j. Mix and boil in q. s. of Water to two Pints, when strain'd, and give it.

The above Method should be continued for six Weeks, or two Months; or even longer, if the Necessity of the Case require it. By the Use of those Medicines the obstructed Pores will be opened; the natural Secretions encouraged; the whole Mass of Blood and Humours sweetened and meliorated; their Superfluity taken off, and the Ulcer gently deterged.

Persons

Persons in this Disease are seldom or never exempt from a Cough ; which is not only (generally speaking) severe of itself, but is of very bad Consequence likewise : For it impels the Humours with Violence upon the Part affected ; and, by that means, dilates and enlarges the Ulcer. For the Relief of that Symptom, I direct the following :

Take Sugar of Roses, and Conserve of Hips, of each scrup. ij. Cyprus Turpentine, scrup. j. Styrax-pill, gr. x. Balsam of Gilead, gtt. vj. Make a Bolus : To be taken every Night, going to Bed.

During this Process, and under this Circumstance of the Disease, the Patient should be well instructed as to his Diet ; and should be very exact in the Practice of it. But, of this Article, more, by-and-by.

If the Disease is judg'd to proceed from an ill Habit of Blood and Humours, (whether it retain to the Viscid and Glutinous, or to the Acid or Acrimonious) we must be very cautious in our Attempts to correct and alter them : For, should we too much exaggerate the Motion of the Fluids, by attenuating, resolvent Medicines, we should necessarily force and dilate the Ulcer, and (it may be) precipitate a Discharge of the vital Juices. However, I think a Medium may be found : And, to that End, I advise as follows ;

Take Crabs-eyes prepar'd, and red Coral, of each dr. iv. Quicksilver depurated, dr. iij. Mix and rub them in a Marble or Glass Mortar twelve Hours, or till the Quicksilver is perfectly divided. Then add Rhubarb, dr. iij. Rob of Elder, and Juniper, of each oz. ij. Make an Electuary : Of which take dr. iij. for a Dose, three times a Day ; drinking after, lb. ss. of the Decoction before-written (made of Sarsaparilla, China, &c).

Or otherwise :

Take Crabs-eyes prepar'd, and red Coral, of each dr. iv. *Poterius's* Antihectic, and medicinal Antimony, of each dr. ij. Rhubarb, Rob of Elder, and of Juniper, of each oz. ij. Make an Electuary. Dose, dr. iij. every six Hours, with half a Pint of the same Decoction.

Either

Either the one or other of these Methods will resolve Viscidity, and correct Acrimony, without doing any Violence or Injury to the cardinal Symptom. And these are the Indications or Intentions to be had in View, whenever the Disease is thus circumstanced.

As to what regards the Ulcer; the curative Indications are, gently to deterge and cleanse, and at the same time to agglutinate and heal it.

Many are the Methods, propos'd, and practis'd, to this End: But I shall leave them all to their respective Founders, and such others as confide in them; and shall propose what I believe will be found very amicable to the Constitution, and as useful to the Disease as any thing else.

Take Gum-lac, Juniper, Styrax, Benjamin, Sarcocolla, Balsam of Tolu, Catechu and Mastich, of each dr. iv. Beat them into a Powder; to which add *Cyprus*, and pure *Venice-turpentine*, of each oz. iij. Clarified Honey, lb. fs. Let them be boil'd gently; always keep stirring, till it comes to a Crust, like to hard Rosin: Then take the Matter, and powder it, and put it in a Matraass, or such-like Glass; to which pour a strong Tincture of Elecampane and Rhubarb, made with Alcohol of Wine, oz. xv. (or q. s. that it may remain above the Ingredients three Fingers) *Mynsicht's* Tincture of Steel, oz. iv. Digest at a gentle Heat, until the resinous Matter is perfectly dissolved, and the Liquor and Colour of a just Consistence, like to Balsam of Peru. And of this Elixir let the Sick take dr. ij. thrice a Day, mix'd with a triple Quantity of Syrup of dry'd Roses.

N.B. *The Elecampane and Rhubarb, used for the Tincture, must be perfectly well-dried: And the Alcohol, or rectified Spirit of Wine, must be of the highest Proof; for should the least aqueous Part remain, either in one or the other, the Dissolution of the Rosin would be, in Proportion, imperfect.*

This Preparation is near a-kin to what I call *Elix. nostr. deterg.* to be found at the End of this Work. But as some small Alteration was necessary for this particular Case, so I was oblig'd to set it down here at length. I will venture to say, it will be found an admirable Remedy in this Case, and for the particular

Purpose to which I advise it. I have found my detergent Elixir answer (in the last Resort) for many other inward Ulcers, where many other Medicines (of no small Repute and Renown) have been fruitless: And therefore, in Parity of Reason, it should be good here.

The original Medicine, or what I call *Elix. nostr. deterg.* was (till this Moment) a Secret with myself; having, at first, projected it to answer another Occasion: But, since the first Invention of it, I have occasionally varied from it, and diversified upon it, according to the Differences of Cases and Contingencies. But this Elixir may be given in another manner, to answer the End proposed; and, perhaps, to better Advantage yet; *viz.*

Take Jesuits-bark in fine Powder, oz. ij. Of the afore-mention'd Elixir, oz. iij. Beat them well into an Electuary, whose Dose is dr. iij. every sixth Hour.

If a Cough should prevail, it is necessary that the Opiate should be continued during this Process; otherwise it may be omitted.

It is highly necessary, that the Sick (in this, as well as the other Species of Consumptions, and under all Circumstances, both of one Sort and the other) should be admonish'd, as to his Diet. And this ought to consist chiefly of boil'd Turneps, Potatoes, dry-bak'd Biskets, and Raisins; Asses, or Goats-milk; Cows-milk, and Snails: And (when Meats are permitted) Veal and Chicken are to be preferred.

C H A P. VII.

Of an INFLAMMATION *of the* MIDRIF.

I HAVE already, in treating of some other inflammatory Distempers, assign'd all the various Causes which contribute and tend to their Production; therefore it would seem unnecessary to repeat them here.

This

This Disease may easily be known by its Situation; by the exquisite Pain that accompanies it; and by the Difficulty of Breathing, that inseparably attends it.

An Inflammation in this particular Part, is accompanied with more various, and more dismal Symptoms, than the other inflammatory Diseases are subject to (the Quinzy only excepted; which, indeed, though upon a different Account, is as dangerous as this). Therefore the Cure ought to be undertaken, and even precipitated without any Delay: Whose Indications consist in Evacuation, Relaxation, and Attenuation.

First, take away Blood plentifully, either from the Foot or Arm, to fifteen or twenty Ounces. Then,

Take emollient Decoction, oz. xij. Sal Gem, dr. ij. Linseed-oil, oz. ij. Make a Glyster: To be given immediately, and to be repeated every Night and Morning, if need.

Let there be used a *Semicupium*, Night and Morning. Then,

Take Lac Sulphur, and Sperma Ceti, of each dr. iv. Russia Castor, and Flowers of Benjamin, of each dr. j. *Lucatelli's* Balsam, oz. ij. Syrup of Marsh-mallows, q. f. to make an Electuary: Of which take the Quantity of a Nutmeg every three Hours; drinking after, a Glass of the following Apozem, warm:

Take the five opening Roots, of each dr. vj. Leaves of wild Poppies, m. ij. Let them be boil'd in q. f. of Fenel-water, to lb. ij. when strain'd; to which add Linseed-oil, and Syrup of Violets, of each oz. iij. Spirits of Sal Armoniac, gtt. cxx. Mix, and give it.

Or otherwise:

Take Stone-horse Dung, lb. fs. fat Figs, oz. iv. fresh Marshmallow-root, oz. ij. Boil gently in q. f. of Fenel-water, to lb. ij. when strain'd; to which add Syrup of wild Poppies, oz. iv. volatile Sal Armoniac, dr. j. Mix, and take oz. iv. after every Dose of the Electuary before-written.

I promise myself, these Things will seldom fail of Success; or, at least, I believe they'll prove as good

for the Purpose, as any particular Method that can be proposed. But (be that as it will) I cannot dispense myself from sticking close to the Letter of my Promise, made in the Preface; *viz.* of being as brief and concise as possible. And, indeed, it would be not only irksome, but preposterous, to detail a long Catalogue of Prescriptions for each Disease I treat on.

C H A P. VIII.

Of Loss of APPETITE, and INDIGESTION.

TH E S E Errors, or Defects, of a natural and good Constitution, generally speaking, go hand in hand. At least, where Appetite is wanting, Digestion will always suffer. But, *vice versa*, the Rule won't always hold good; for a Person may enjoy a good Appetite, and, at the same time, stand in need of a good Digestion. The Reason of this will appear plain, if we take a View of all the various Causes that respectively contribute to the Production of these Disorders. And, first, of Inappetency, or a *Decay of Appetite*.

This Disorder may challenge various particular and distinct Causes. *Ex. gr.* First, It may arise from a Relaxation of the Stomach's Nerves and Fibres: In Consequence of which, they will be less sensible of, and obedient to the *Stimulus*, of what the Chymists call the *Acidum esuriens*. And as it is the peculiar Prerogative of that Acid to excite Hunger, so it is in the Perception of its *Stimulus* that Hunger consists. Or, Secondly, The interior Glands of the Stomach may be choak'd and obstructed with phlegmatic, fizy Humours, in such manner, as to hinder the Secretion of the said *Acidum esuriens*, and the other Juices, with which the Stomach ought to be furnish'd. Thirdly,
The

The Nerves of the Stomach may be so compress'd, by the distended Glands which are incumbent on them, as to hinder the Access of the animal Spirits to the Stomach; whose Presence there, is always judg'd necessary to the Excitement of a natural and chearful Hunger. Or, fourthly, A Person's Stomach may be sheath'd and defended against the necessary *Stimulus*, by the Adhesion of fizy, viscous Humours, to its inner Coat or Membrane. Now, 'tis certain, when the Appetite is obstructed, injur'd, or impair'd, by or from any one of these Causes, Digestion will necessarily be brought into the Account. On the other hand; Digestion may sometimes be an original Disorder, and independent of any Precursor: In which Cases, the Appetite may remain unhurt. When this is the State of the Case, the Disorder in question must necessarily result from one or other of the following Causes; *viz.* first, Either from a Hindrance or Defect of the Stomach's Attrition: Or, secondly, From an ill-proportion'd Mixture of those Juices, which conjunctively constitute what we call the *Menstruum* of the Stomach. Sometimes, again, the Office of Digestion may be eluded, by the ill Quality, or the undue Quantity, of the Food we eat; and at others, again, be frustrated by the Liquors we drink with our Food: And, under all and each of these Circumstances, the Appetite may remain intirely good.

The Indications of Cure will vary, according to the different Causes from whence the Disorder is produced. *Ex. gr.* If from a Relaxation of the Stomach's Nerves and Fibres; the Intentions are, then, to warm, irritate, invigorate, and contract. If from the Glands being choak'd and obstructed, by phlegmatic, fizy Humours; the Indications are, to incide, attenuate, resolve, deterge, and cleanse the same. And, 3dly, If to such Remedies as are properly calculated to answer those Intentions, we add those of a cordial, aromatic Quality; the third Cause assign'd, may be redress'd

dress'd at the same time. The fourth and last Cause assign'd, indicates due Evacuation by Emetics and Cathartics.

For the first Cause assign'd :

Take Filings of Iron in fine Powder, dr. vj. Species of Diambre, and Powder of Galangal, of each dr. ij. Species Diatrion Pipericon, and Cubebs powder'd, of each dr. j. Vitriol of Steel, scrup. ij. candy'd Ginger-root, oz. ij. Syrup of the same, q. s. to make an Electuary: Of which take the Quantity of a Nutmeg, twice a Day.

During the Use of the above, order that of *Spaw* Water: Of which it would be proper to drink half a Pint every two Hours, beginning about Eight o'Clock in the Morning.

For the second Cause assign'd :

Take Steel prepared with Tartar, dr. iv. vitriolated Tartar, dr. iiij. Arum-root, and Rhubarb, of each dr. ij. Ens Veneris, dr. ss. Conserve of Scurvygrafs, oz. ij. Syrup of the five opening Roots, q. s. to make an Electuary, whose Dose is dr. iiij. twice a Day; drinking after, oz. iiij. of Juice of Garden Scurvygrafs, depurated with Cream of Tartar powder'd.

Take Powder of Saffron and Nutmeg, of each gr. xv. Russia Castor, and volatile Salt of Vipers, of each gr. v. Confection of Alkermes, q. s. to make a Bolus: To be taken every Night, going to Bed.

By this *Bolus*, the third Cause assign'd will be rectified.

For the fourth and last Cause assign'd :

Take Ipecacuana powder'd, scrup. j. emetic Tartar, gr. iiij. Conserve of Mint, q. s. to make a Bolus: To be taken at six o'Clock in the Evening; drinking after, plentifully, of the Infusion of Cardus Benedictus, between the Vomitings.

Take Rhubarb, and Species of Hiera Picra, of each dr. ij. Vitriol of Steel, scrup. ij. Mix well, and with q. s. of Elixir Proprietatis make forty Pills; of which take five every Morning, sleeping after.

When

When Indigestion results from Inappetency, it will always be rectified by such Medicines as reprove and cure the antecedent Disorder.

But when Indigestion is an original Malady, and is wholly independent of any Precursor, regard must then be had to its own specific Causes. *Ex. gr.* When this Indisposition proceeds simply and purely from a Hindrance or Defect of the Stomach's Attrition, a regular and continued Use of the *Spaw* Water may be depended on as a Cure.

But if the Patient's Love of Mystery should require something else, I would then advise the following Electuary, as an Assistant:

Take Rust of Iron in subtile Powder, dr. vj. Powder of Arum-root, dr. iij. Species Diatrion Pipereon, and Powder of Zedoary, of each dr. j ss. volatile Salt of Vipers, scrup. ij. Conserve of Roman Wormwood, oz. ij. Syrup of Mint, q. s. to make an Electuary. Dose, the Quantity of a Nutmeg, twice a Day.

By the Use of *Spaw* Water, and this Electuary, any Errors or Defects in the proper Menstruum of the Stomach will likewise be rectified and repaired.

CH A P. IX.

Of a LIENTERY.

THE Food of Persons under this Disease undergoes no manner of Change or Alteration, from the Time that Mastication is performed, till that of its Excretion. Hence 'tis manifest, that the Office of Digestion is intirely subverted and abolish'd; or, rather, intercepted or suspended.

This is the real Nature and Constitution of the Disease. But, to discover the true, genuine Cause of it, will be the great Difficulty.

Several Causes present, indeed, and respectively lay their Claims, as Parents of this Disease: As, *1st*, An exceeding cold Temperament of the Stomach and Guts, or an accidental Privation of their natural and necessary Heat. *2dly*, A Surcharge of Slime and *Mucus*, besmearing and sticking to their inner Surface; which may render them so slippery, that the Aliments can't be sufficiently retain'd for the Office of Digestion to take Place. *3dly*, The whole alimentary Duct may be greatly relaxed and weakened, so that the incumbent Food immediately forces itself through by its own Weight. Or, *lastly*, (and which is the most probable of all) the whole alimentary Duct may become paralytic; and such a Circumstance would infallibly produce the Disease in question, to the greatest Degree it is capable of.

But as this Distemper does more probably arise from one or other of the two last-mention'd Causes, than from either of the former; so I shall have those only in View, in my Propositions of Cure.

The curative Indications, supposing the Disease to arise from a universal Relaxation and Weakness of the alimentary Duct, are these: *viz.* To strengthen and restore the contractile Force of the intestinal Fibres; to warm and stimulate their Nerves; to invigorate the animal Spirits; and to revive the natural Actions of the Stomach and Guts.

If this Disorder is judg'd to result from a paralytic State of the same, (*viz.* the alimentary Duct) then, indeed, the Intentions curative will vary in some measure. When the Case is such, the particular Cause of that paralytic State is to be first consider'd: And when that is discover'd, our next Endeavour must be to state the Intentions of Cure, and to concert proper Remedies to execute it. But, for these, we refer our Readers to the Chapter which treats of the *Palsy* abstractedly.

If the Disease in question is judg'd to proceed from a Relaxation and Weakness of the whole alimentary Duct, I direct as follows; *viz.*

Take Species of Hyacinth, Dianthus, and Rhubarb toasted, of each dr. ij. Oil of Cinamon, gtt. viij. *Mynsicht's* Tincture of Steel, gtt. cl. Conserve of Sloes, oz. ij. Syrup of Myrtles, q. s. to make an Electuary, whose Dose is dr. ij. every fourth Hour; drinking after, oz. iij. of the following Infusion:

Take Peruvian Bark in gross Powder, oz. ij. Oak-bark, oz. j. Pomegranate-bark, and Myrtle-berries, of each oz. ss. Flowers of Red-roses, and Balauſtines, of each dr. ij. white Sugar-candy, oz. ij. Let them be infused twelve Hours, with a good Heat, in a sufficient Quantity of red Portugal Wine, to two Pints, when strain'd.

Another Method:

Take Species of Hyacinth, dr. ij. Powder of Galangal, and Rhubarb toasted, of each scrup. iv. Vitriol of Steel calcin'd to a Whiteness, and Plumose Alum levigated, of each scrup. ij. Oil of Cinnamon, gtt. xij. Make a Powder, to be divided into eight Papers; one of which is to be taken every four Hours, with six Spoonfuls of the following Tincture:

Take Oak-bark bruised, oz. j. Red-roses, dr. iv. Mix, and pour to them boiling Water, lb. ij. Let it stand in Infusion three Hours, dropping in Spirits of Vitriol, gtt. lx. Then strain for Use.

Though I have seem'd above to exclude myself from all further Consideration of this Disease, as proceeding from a paralytic State of the Intestines, &c. nevertheless, I will exhibit one Process, which is as follows:

Take aperient Saffron of Iron, dr. vj. Virginian Snake-root, and Species of Galangal, of each dr. j ss. Russia Castor, and volatile Salt of Vipers, of each dr. j. Sagapenum strain'd, dr. ij. Balsam of Gilead, q. s. to make a Mass; and form eight Pills out of every Drachm; five of which are to be taken every six Hours, drinking after, oz. iv. of the following Infusion:

Take Mustard-seed, and Horse-radish-root, of each oz. ij. Arum-root, and Zedoary, of each dr. iv. Root of Pellitory of *Spain*, and Cubebs, of each dr. ij. Rust of Iron, oz. j. Let them be
beat

beat together into a gross Powder, and infuse, by a gentle Heat, in two Pints of Old-hock, for two Days; then strain, and gently press it, for Use.

These Methods being respectively used, according to the Cause from whence the Disease proceeds; I may venture to promise a happy and speedy Cure from them.

C H A P. X.

Of a DIARRHÆA.

THIS Disorder is so very common with us, that sooner or later, more or less, it is the Portion, perhaps, of every individual Part of the human Creation.

The Reason of its Generality, and Frequency, I take to be this: *viz.* That it is producible from very various and common Causes; and even such, as we almost every Day incur.

It is owing partly to its Frequency, and partly, again, to its Exemption from Pain, or any material Uneasiness, (at most) that People commonly treat it with Neglect and Inattention. And moreover, from such Neglect and Inattention, a slight Disorder of this Sort frequently becomes radicated, habitual, and obstinate of Cure: And sometimes, again, it degenerates into a Dysentery.

Its Causes (as abovesaid) are very various and numerous: Sometimes it arises from Intemperance, or Excess, either in our Meats or Drinks; at others, from Indigestion, or from a Relaxation and Weakness of the Intestines: But, most commonly, it proceeds from catching Cold, or an Obstruction (whether accidental, or habitual) of the excretory Pores of the Skin. Besides the Causes already assign'd, it
may

may result from a preternatural Ferment, and Rarefaction of the Fluids; for hence the *Impetus*, and Pressure of the Fluid, would be proportionally increas'd upon all Parts of the Body (especially its Superficies, as well internal as external): And if (in such Case) the Glands of the Guts should succumb, and yield first, the necessary Consequence will be a *Diarrhœa*.

These Things being granted, which, I think, can't be denied; not only the Intentions, but the Methods of Cure likewise, ought to vary accordingly. But notwithstanding this, I dare say, we have some Gentlemen, of the empirical Order, who will pretend to cure all Sorts of Belly-fluxes (from what Cause soever derived) by one single *Nostrum* or *Arcanum*. Indeed, I know one Gentleman (a Man of tolerable Sense and Learning, but out of the Pale of that Tribe I just now mentioned) who confidently affirms, that he has found out an infallible Cure, not only for all Belly-fluxes, (from what Cause soever deriv'd) but for all Bloody-fluxes likewise. But, notwithstanding this, and that I have all imaginable Deference for this Person's good Sense, &c. I can neither credit nor commend his Confidence.

The proper Intentions or Indications of Cure (supposing the Disease an Effect of the first Cause assign'd) are, to cleanse and strengthen the Stomach and Guts. If it is judg'd to result from the second mention'd Cause, then warming and comforting the alimentary Duct are indicated, and restoring the digestive Faculty. If it proceeds from Weakness and Relaxation, we must invigorate, warm, and corroborate. Supposing it to come from catching Cold, or an Obstruction of the excretory Pores, (whether accidental or habitual) the Cure will be perform'd by Diaphoretics, and Sudorifics, mix'd with Astringents. If it flows from a preternatural, inordinate Ferment, and Rarefaction of the Fluid; the suppos'd Ferment is then to be corrected

rected or suppress'd, and the over-stretch'd intestinal Glands to be restring'd, and restor'd to their natural State. However, be the Cause what it will, it's always necessary to premise a Vomit, and a Dose of Rhubarb, prepar'd and apply'd in the manner hereafter specified. To answer the Indications propos'd upon the first Supposition;

Take Ipecacuana in Powder, and Conserve of Red-roses, of each dr. ss. Syrup of Mint, q. f. to make a Bolus. To be taken in the Evening, drinking plentifully of Carduus tea between the Vomittings.

Take choice Rhubarb and Diascordium without Honey, of each dr. j. Powder of Virginian Snake-root, gr. x. Laudanum Opiatum, gr. j. Oil of Cinnamon, gtt. ij. Syrup of dry'd Roses, q. f. to make a Bolus. To be taken every Night going to Rest, so long as Need requires; drinking after it a Draught or two of Sack-whey, with a little Mace and Cinnamon boil'd in it.

N. B. *The Use and Design of ordering the Sack-whey here, is to correct, digest, and concock, the crude peccant Humours:—Legacies, which Debauches, either of Meats or Drinks, generally bestow upon the Primæ Viæ.*

If upon taking four or five of those Bolus's the Flux should not stop, then proceed as follows; viz.

Take Rhubarb roasted, dr. j. Species of Hyacinth, scrup. j. Diascordium without Honey, scrup. iv. Laudanum Opiatum, gr. j ss. Oil of Cinamon, gtt. ij. Syrup of dry'd Roses, q. f. to make a Bolus. To be taken every Night going to Rest, till the Looseness is stopt.

If Indigestion lays Claim to this Offspring, I advise the following.

The Vomit above prescribed being first given,

Take Rust of Iron in subtil Powder, dr. iv. Rhubarb, and Species of Diambre, of each dr. ij. Laudanum Opiatum, gr. vj. Oil of Cinnamon, gtt. x. Candy'd Nutmeg, and Conserve of Mint, of each oz. j. Syrup of dry'd Roses, q. f. to make an Electuary: Of which take the Quantity of a Chestnut thrice a Day, drinking after it a Glass of the following Decoction:

Take

Take Mace and Cinnamon, of each dr. iv. Ginger, and *Winter's* Bark, of each dr. ij. white Sugar-candy, oz. ij. Let them be boil'd gently in q. f. of Water to lb. ij. when strain'd; to which add strong Cinnamon-water, oz. iv. Mix.

If Relaxation and Weakness of the Intestines is judg'd to be the Cause, then the following are to be preferr'd:

Take Rhubarb well-toasted, and Virginian Snake-root, of each dr. ij. Japan-earth and pure Mastich, of each dr. j. old Venice-treacle, oz. j. *Mynsicht's* Tincture of Steel, dr. ij. Syrup of Myrtles, q. f. to make a soft Electuary. Of which take the Quantity of a small Nutmeg three times a Day, drinking after it a Draught of the following Infusion:

Take Oak-bark and Red-roses, of each dr. iij. Let them be infused warm for twelve Hours, in lb. ij. of red Port-wine.

Or, in place of the above-written Prescription,

Take Peruvian-bark in fine Powder, dr. xij. Rhubarb, a little toasted, dr. iij. choice Mastich, dr. ij. Powder of Arum-root, and Zedoary, of each dr. j. *Mynsicht's* Tincture of Steel, dr. vj. Let them be rubb'd well together in a Mortar; then add Venice-treacle, oz. j. ss. compound Syrup of Mint, q. f. to make an Electuary of a soft Consistence; whose Dose is dr. ij. every six Hours, drinking after, a Draught of the above-written Infusion.

If Repletion, (from catching Cold) or an habitual Adstriction of the excretory Pores, is in Fault, (after the Patient hath taken a Vomit) I direct thus; *viz.*

Take choice Rhubarb, scrup. ij. Virginian Snake-root powder'd, gr. xv. volatile Salt of Hartshorn, gr. viij. Venice-treacle, scr. iv. Syrup of Poppy-heads, q. f. to make a Bolus. To be taken every Night going to Bed, drinking after, lb. ss. of the following Decoction warm:

Take Roots of Vipers-grass, oz. ij. Sarsaparilla and China, of each oz. j. Cinnamon, oz. ss. Mace, dr. ij. Mix; and let them be boil'd in q. f. of Water to lb. ij. when strain'd; to which add Syrup of Elder, oz. iij. Mix. You may exhibit also, if you please, scrup. ij. of Powder of Rhubarb, every other Morning, in any proper Vehicle.

If

If a preternatural Ferment, &c. give Birth to the Disease; first, correct the Cause with the following, and afterwards suppress the Flux with any of the Astringents described above.

Take Milk of Sulphur, dr. iv. Diaphoretic Antimony, *Poterius's* Antihectic, and white Amber prepared, of each dr. ij. Rhubarb, dr. iij. Rob of Elder, oz. ij. Syrup of Poppy-heads, q. f. to make an Electuary; of which take the Quantity of a Chestnut, thrice a Day, drinking after, a Draught of the white Decoction.

Take Barley Cinnamon-water, oz. iij. Syrup of Poppy-heads, oz. j. Sal Prunel. dr. j. to make a Draught, to be taken every Night, going to Rest.

It may be objected, perhaps, that I have been too concise and limited in the Remedies I have proposed for the Cure of this Disease, considering it may be produced from so many and different Causes: But nevertheless, I believe they will be found, upon Trial, to fail but very seldom.

I don't give myself the Trouble to prescribe Rules of Diet for this Distemper; because almost every one's own Reason and Experience will suggest those Things to him, if he will but conform to their Dictates.

C H A P. XI.

Of a DYSENTERY.

THIS Disease differs from that preceding, not only in the Quality and Importance of the Matter excreted; but is likewise more vexatious in its Symptoms, and more dangerous in its Consequences.

A Dysentery cannot reasonably be judged to arise from Errors of the *primæ Viæ*, (such as Debauches, Surfeits, and the like) except the morbid Humours
thence

thence produced and form'd in them, are extremely acrid and corrosive: But the ordinary and most probable Causes are (in my Judgment at least) the following; *viz.*

Great Repletion from catching Cold; an exalted Acrimony in the Blood and Humours; preternatural and exorbitant Ferments in the same; or (in time) any thing else whatever, which may either greatly enhance the Quantity, vitiate the Quality, or increase the Blood's Velocity and Impetus upon the Surface of the Body.

To explain by what Mechanism those Causes may or do (respectively) produce this Effect, will (I fancy) be no very difficult Task: And, first, I will examine and endeavour to explain how it is brought about by means of great Repletion.

The Word *Repletion* implies, as 'tis well known, (for I don't tell this as a Secret) an increased preternatural Quantity of Fluid in an animal Body. Now, in proportion as the Fluid is increased beyond its natural and due Measure; so will its *Impetus* and Pressure be augmented upon the Surface of the whole Body, as well its internal Surface, as the external.

This increased *Impetus*, Weight, and Pressure of the Fluid, being determined or applied equally to all Parts of the Body, would be equally felt and sustained by all, provided they were (with regard to their respective Offices) equally strong and defensible. But when, on the contrary, there is a manifest Disparity in the relative Strength and Resistance of different Parts; the weakest are then sure to yield and give way: And thus, when a bloody Flux is the Effect of Repletion, we may conclude, and be perfectly sure, either that the Glands and capillary Arteries of the Guts were comparatively weaker than any other Part of the Body; or else that the Blood was critically determined that way, or impelled thither by some intestine Explosion. Now, 'tis evident, when
the

the Blood's Weight and Pressure upon the Guts are greater than they are able to resist and sustain; the Consequence will necessarily be an Irruption of Blood at the Extremities of the Arteries, into the common Chanel of the Body; from whence again it will soon be discharged by Stool. On the other hand; supposing the whole Fabric of the Guts are (with respect to their Office or Function) as strong and defensible (or even exceeding perhaps in those Particulars) as any other Part of the Body: Yet nevertheless, if the Fluids should be critically determined and impelled that way, by any accidental, intestine Explosion; an Irruption of Blood, at the Extremities of the Arteries of the Guts, would very probably ensue. Here we proceed to examine by what Mechanism the second Cause assign'd produces this Effect. And, first:

When the Blood, by any Accident, has acquired an exalted or predominant Acrimony; we are to suppose the acrimonious Humours are intimately and uniformly mix'd and blended with the Blood; and consequently are equally dispens'd with it, to all Parts of the Body in common.

But notwithstanding this, it possibly may (as doubtless it often does) happen, that many of the supposed acrid Particles will cluster, and run many into one, and thus become too big to admit of a free Circulation. Now, should any of those acrid Humours, (having thus enlarged their Bulk) be determined critically, or fall accidentally into the capillary Arteries of the Guts, (and the same in any other Part, where the Vessels are too small to allow them Passage) they will stagnate, fret, tear, and dilacerate their containing Vessels; and by that means cause an Effusion of Blood into the Guts: Or otherwise, the Blood, by means of its inherent, acrimonious Particles, may become too rare, volatile, and rapid; and hence, moving with an increased *Impetus* and
Velocity

Velocity upon all the Extremities and Superficies of the Body ; it may either over-stretch and distend, or else tear and dilacerate, some of the smaller or capillary Arteries, and so cause a Hemorrhage, or Flux of Blood ; which, happening in the Guts, will obtain the Name of a Dysentery.

That a redundant Acrimony in the Blood (which will infallibly excite a preternatural Heat) does subject it to inordinate Commotions, Ferments, and Rarefactions, is not only probable, but proveable likewise.

I have seen some Instances of Persons under this Predicament, in whom the Blood has gush'd out at the Mouth, Eyes, and Ears : whereas, had the Glands and Arteries of the Guts been relatively weaker, and less defensible than those of the Parts above-mentioned, the Blood, in that Case, would doubtless have made its Way off there, in the Shape of a Dysentery.

We now come to consider the third and last Cause assigned : And this comprehends, in general, whatsoever is capable, either of augmenting the Quantity, of vitiating the Quality, or of enhancing the Blood's *Impetus* and Velocity upon all Parts of the Body, but more especially its outward and inward Superficies.

It is very certain, that the natural and due Measure or Quantity of our Fluids may be augmented otherwise, besides catching Cold, or an habitual Stoppage of the excretory Pores of the Skin : But then, from what original Cause soever this Effect is produced ; in case it finally tends to the Production of a Bloody-flux, it must necessarily be brought about by the Mechanism already assigned. Moreover, the *Momentum*, Velocity, and *Impetus* of the Blood upon the Surface of the Body, may be enhanced from various Causes, without the Necessity of supposing an acrimonious *Substratum* ; as for Example, by excessive

Heat, violent Exercise, or accidental and sudden Ferments, Rarefactions, and Explosions.

When a Dysentery flows from any of these transitory Accidents, 'tis always to be supposed, that the Constitution of the Guts was comparatively weaker than any other Part of the Body: Or else, that the Blood was critically determined and impelled that way, with such Violence as to force open the Extremities of the capillary Arteries.

Sometimes the Disease in question is epidemical; and then it is generally accompanied with a Fever; or perhaps is rather a Symptom of a Fever; and when this is the Case, it commonly sweeps off great Numbers.

The original Cause of this Kind of Dysentery (and the same of all other epidemical Diseases) exists either in the Air, or the Soil; which, being impregnated and polluted with some malignant or other noxious Effluvia, or other Particles, communicates them to our Blood, either with our Aliments, or by the Act of Inspiration, as it shall happen to exist, either in the Air, or the Soil.

The first Instances of Outrage, that the supposed malignant or other noxious Effluvia display in our Bodies, is, putting our Blood into violent Ferments and Ebullitions. These (in proportion to their respective Degrees) will enkindle a Fever: But, in explaining why the Blood bursts out, and discharges itself at the Extremities of the intestinal Arteries, rather than any-where else; to explain this, I say, we must recur to the Reasons already assigned upon another Occasion, *viz.* That the arterial Vessels, as well as the Glands in which they terminate, are either comparatively weaker than the other Parts of the Body; or else, that the Blood forces itself off at the Extremities of the Arteries, from the Causes above-mentioned.

It would be a very great Point gained, could we happily find out a sovereign and infallible Remedy for all sorts of Dysenteries, especially the epidemical: But as these latter may, and undoubtedly are (at different Seasons, and in different Climates) caused by different Species of noxious Humours; so it would seem very difficult, and next to impossible, that any one Remedy should be discovered, capable of correcting and subduing (alike) all the supposed various Species: However, when I come to consider this Distemper in its curative Part, I will digest and offer (in general Terms) what in my Judgment bids fairest for, and perhaps may come nearest to an universal Remedy. But before I undertake to determine on Methods of Cure, I will first lay down the curative Indications, by the way: And, first; Supposing a Dysentery to spring from Repletion, which is the most immediate and infallible Consequence of catching Cold; in that Case the proper Intentions of Cure will be as follow; *viz.* 1st, To promote Depletion by Bleeding, and by opening the excretory Pores of the Skin with gentle diaphoretic and sudorific Medicines, joined with such Things as are of a balsamic, healing Quality; and thus, rather to divert than stop the Flux. 2^{dly}, When the Abatement of the Flux specifies, that the Tendency and Pressure of the Fluid is diverted from the Intestines; and that the Humours are turned upon the excretory Pores, their natural and proper Emunctories; then it is that we are to heal, strengthen, and confirm the injured Parts.

When this Disease is founded in Acrimony of Humours, and (perhaps) an Augmentation of the Blood's Velocity, &c. then the Indications of Cure are, 1st, To sheath and obtund the acrid Humours: 2^{dly}, To appease the too exalted Motion of the Fluid: 3^{dly}, To heal and astringe gently; and at the same time to

correct, alter, and sweeten the acrid, morbid Humours.

If this Disease arises from another Sort of Repletion, (such as results from too copious a Nutrition) together with a hot, volatile State of Blood; the Indications here are, *1st*, To order comparative Abstinence: *2dly*, To apply such Things (whether as Food or Physic) as cool, condense and agglutinate; and, lastly, When the Surcharge of Blood and Humours is taken off, or duly lessened; then to retract, heal, and restore the Seat of the Disease, by proper Agglutinants and Astringents.

To cure a Dysentery, produced by the Cause first assigned, (*viz.* from Repletion by catching Cold) I advise thus: In the first place, take away a sufficient Quantity of Blood: — Then

Take Ipecacuana in Powder, dr. fs. Conserve of red Roses, dr. fs. Syrup of Mint, q. s. to make a Bolus, to be taken in the Evening, drinking plentifully of Carduus Tea between the Vomitings.

Take Venice Treacle, dr. j. Rhubarb, scr. ij. Powder of Saffron and Contrayerva, of each gr. x. Liquid Laudanum, gtt. x. Syrup of Elder, q. s. to make a Bolus, to be taken every Night going to Bed, drinking after, lb. fs. of the following Apozem, warm.

Take Roots of Vipers-grass, oz. ij. of Sarsaparilla and China, of each oz. j. Elecampane, Florentine Orris, Shavings of Ivory, and Hartshorn, of each oz. ij. Mix and boil in q. s. of Sack-whey, to lb. ij. when strained; to which add, Syrup of Elder, oz. iv. Mix for the fore-mentioned Use.

Let him also drink the same Quantity every Morning, warm.

If the Flux of Blood increaseth more, let the following Glyster be given him, and repeated as often as Need shall require.

Take the Carminative Decoction, oz. xij. with Chalk and Bole Armeniac, of each oz. j. boil'd in it; Diafcordium, oz. j. Venice Treacle, oz. fs. The Yolk of two Eggs. Mix.

It would be convenient, (upon taking this Glyster) that the Patient be covered very warm in Bed, and that he retain it so long as possible.

Take Spanish Liquorice, pure and sliced, oz. j. Beat it well in a Marble Mortar, adding by little and little Rob of Eider and Venice Treacle, of each dr. xij. Continue beating, till it be reduced into a smooth Pulp; to which add, Saffron and Olibanum in Powder, of each dr. ij. Syrup of Quinces, q. f. to make an Electuary, Dose dr. ij. thrice a Day, drinking after, a Draught of the fore-written Apozem.

When the Flux is considerably abated by the Use of the above Remedies, then proceed with the following; which, I believe, will not fail to complete a Cure in a little Time.

Take astringent Saffron of Steel, dr. iv. Rhubarb toasted, and Species of Hyacinth, of each dr. ij. Mastich and Olibanum, of each dr. j. Conserve of Slows, oz. ij. Syrup of Quinces, q. f. to make an Electuary, of which take dr. ij. thrice a Day; adding always to the Night-dose Laudanum Opiatum, gr. j fs.

Take burnt Hartshorn, white Chalk, and Gum Arabic bruised, of each oz. j. Cinnamon and Oak-bark, of each dr. iij. White Sugar-candy, oz. iij. Let them be boiled in q. f. of Water to three Pints, when strained; of which drink a Glass after every Dose of the Electuary; and to be taken also for common Drink.

When this Disease takes Rise from a redundant Acrimony, I recommend the following:

Take Venice Treacle and *Lucatelli's* Balsam, of each oz. j. Milk of Sulphur and Sperma Ceti, of each dr. iv. Rhubarb and Olibanum, of each dr. ij. *Poterius's* Antihæctic, and Diaphoretic Antimony, of each dr. j fs. Syrup of Marshmallows, q. f. to make an Electuary; of which take the Quantity of a Nutmeg, every six Hours, drinking after, a large Draught of the following Decoction, warm.

Take Roots of common Grass, oz. ij. Sarsaparilla and China Roots, of each oz. j. Juice of Liquorice and Oak-bark, of each dr. vj. Ifinglass cut small, dr. iv. White Sugar-candy, oz. ij. Let them be boiled in q. f. of Water to lb. ij. when strained, and give it.

Take Cowslip-water, oz. iij. Oil of sweet Almonds, and Syrup of Quinces, of each oz. j. Yolk of one Egg, and *Sydenham's* liquid Laudanum, gtt. xxv. to be taken every Night.

Thus far of a Dyfentery, considered as simple and genuine; not epidemical, nor associated with a Fever.

We come now to consider it in another View; *viz.* as an epidemical Disorder, and accompanied with a Fever.

I have already laid it down as undeniable Truth, and Matter of Fact, that the most remote Cause or Origin of epidemic Dyfenteries exists either in the Air we breath; or else in the Soil whence we derive our Nuture: And furthermore, that if it exists in the Air, we imbibe or take it in by Respiration; but if in the Soil, 'tis then convey'd to us in our Food, which had first borrowed it from the vitiated Soil, which it either fed or grew upon.

The curative Indications here are, first, to correct and subdue; or else, to discharge and expel the genuine Particles, or morbid Humours: 2^{dly}, to assuage and suppress the inordinate Ferment and Ebullition of the Blood; and by skilfully managing these Purposes, the Fever will yield of course.

First, take away oz. xv. of Blood, more or less, according to the Strength and Temperament of the Sick. — Then

Take *Aethiop* mineral, dr. vj. Diaphoretic Antimony, and *Poterrius's* Antihectic, of each dr. ij. Contrayerva-root powder'd, dr. j. Camphire, dr. ss. Rob of Elder, oz. ij. Syrup of Marshmallows, q. s. to make an Electuary; of which take the Quantity of a Nutmeg, every sixth Hour; drinking after, oz. vj. of the following Apozem, warm:

Take Raisins, oz. iij. Root of Vipers-grass, oz. j ss. Of the five opening Roots, of each dr. vj. Juice of Liquorice, and true Maiden-hair, of each dr. iv. Oak-bark, dr. iij. Let them be boiled in q. s. of Water, to two Pints, when strained.

The Clyster described above, may be given every Night, or as often as Occasion shall require, in case the Flux should be too impetuous.

These Remedies are properly (not to say, equally) calculated, either to alter and correct, or to digest and concoct, the malignant, morbid Humours: And it is not impossible, but they may answer one or other of these happy Purposes, be the constituent Humours of the Disease of what Kind or Nature they will: For though it is greatly to be feared, indeed, that no Time or Pains will disclose to us such a Thing as a universal *Panacea*, or a Medicine qualified to correct and subdue all Kinds and Degrees of morbid Humours whatsoever, whether they may subtend acute or chronical Diseases: Nevertheless, as to the constituent Humours of acute Diseases, (since these cannot be so compact, solid and hard of Digestion, Division, or Dissolution, as those of the chronic Kind) a sovereign Corrective may one Day, perhaps, be found out: However, I don't offer the above Process as a Thing absolutely equal to this great Design, but rather as a Sketch or Sample, to prompt and excite the more experienc'd and learned Gentlemen of the Faculty, to improve upon it: Nor yet would I be thought to depreciate what I have advanced; or to suppose it utterly incapable of answering the Ends proposed.

It may be objected, perhaps, that in the Method I have laid down, I have not interspersed, either Astringents or Balsamics, to curb and restrain the Impetuosity of the Flux; and, consequently, have made no Appeal to such Things as retract the over-stretch'd, distended Arteries, or heal the torn, excoriated Intestines.

If this should happen, I must allow the Objection in fact, but deny the Justice of it: For, I apprehend, should those Views be pursued to any Degree in this

Case, they would not only be improper, but highly injurious likewise.

It is evident, I think, next to Demonstration, that if such Astringents could be applied in this Case, as should at once suppress the sanguineous Flux, (without the previous Application of Demulcents, Correctives, Alteratives, and Diaphoretics) the Fever must be greatly increased thereby, and probably would soon terminate in some fatal Symptom: For these Reasons I have strictly confined myself to the Intentions laid down; and besides, the Clyster I have directed to be repeated every Night, will be sufficient to sheath and defend the Guts against the Irritation of the morbid Humours, and will in some measure assuage the Torrent of the Flux.

The Oak-bark (in the Decoction) is the only Astringent I durst venture upon internally. I have made no Mention of a Vomit in this Case, which however may be allowed, and ought to be applied, if Disorders of the Stomach require it; and as such, the *Ipecacuana* is preferable to all others whatever.

I have heard very surprising, and indeed almost incredible Accounts of the Virtues and Efficacy of *Ipecacuana*, given by way of Clyster for this Distemper.—It is said, that when the *French* Army was infested with an epidemical Dysentery, in the Reign of *Lewis XIV.* (which swept off great Numbers of their Troops) one of the Physicians happily hit upon this Method, by which he cured almost every one he undertook, though scarce any body had survived the Disease, till that Method was introduced.—I have had this Account upon so good Authority, that I don't know how to refuse giving Credit to it; and yet I cannot well reconcile to myself, by what Mechanism it performs these wonderful Feats; nor yet what Reasons could first dictate the Use of it that way.

Reason

Reason as well as Experience tells us, that *Ipecacuana* irritates not only the Stomach, but the Guts likewise; and that, to a rational Man, should seem very bad for a bloody Flux. It is by this irritating Property that it unloads the Glands of the Stomach, by causing them to spew out their superfluous Contents: And to the same is owing the Stools that generally succeed the Operation of an *Ipecacuana* Vomit: However, allowing the Fact, (tho' the Thing is really a little mystical) I will endeavour to account for it in the best manner I can; which take as follows:

The first Action or Effect which *Ipecacuana*, given Clyster-wise, produces on the Guts, is Irritation. By this it causes the distended, over-stretched Glands and Blood-vessels either to eject or repel their superfluous Contents; and consequently (for the present Instant at least) must increase the Discharge of Blood, &c. But then, if the Glands and Blood-vessels (being contracted by such Irritation) should remain in that contracted State, the Flux will (of course) be resisted and stopped: But supposing this; what will become of the superfluous Blood and Humours, which till now were determined and discharged by the Guts? Why; they must either take another Course; or else remain in their proper Vessels, whence very fatal Effects may ensue. Were these wonderful Virtues and Effects ascribed to repeated *Ipecacuana* Vomits, the Story would carry some *Vraisemblance*, or at least some Possibility of Truth: For Vomits, as they throw the whole human Frame into a sort of temporary Convulsion, and greatly augment the Action of the Fluids, and the vibrative Force of the Solids; so they may tend to the Division and Comminution of the morbid Humours; and, finally, might force them off by the excretory Pores of the Skin.—And most assuredly, if *Ipecacuana* Clysters have really atchieved the great
Cures

Cures ascribed to them, they must have operated on the Disease by the same Mechanism as mentioned above (or else by Magic); For 'tis reasonable to judge, that, when a powerful *Stimulus* is communicated to the intestinal Fibres by the Application of any Medicine; the same will be carried on (with a proportional Diminution) to the Superficies of the Body. And hence it may come to pass, that not only the Glands, Vessels, and Fibres of the Guts, will be contracted and restored; but the vibrative Force of all the Solids increased likewise: And in consequence of this, the morbid Humours may be attenuated and dissolved, or divided and comminuted, and lastly be forced off by the excretory Pores. Moreover, the more subtil Essence of the *Ipecacuana* may be absorbed by the Glands of the Guts, and so be convey'd to the Blood; on which it will act in much the same manner, as the grosser Substance was supposed to do upon the Intestines.—But, to recur to my Subject;

There is yet another Objection, which perhaps may be exhibited (by those who only judge of Things in *prima facie*, or see them but skin-deep) against the Method I have laid down for the Cure of an epidemic Dysentery; at least against such Things in it, as retain to a diaphoretic and a sudorific Nature.

I will plead either in Bar, or else in Answer to this Accusation, before-hand: But then I will first anticipate their Charge against me.

They will say, (doubtless) that the Blood is already preternaturally rarefied by the Intromission of malignant, venomous *Effluvia*; and so violently agitated, as to rush off, or break its Way out of the Extremities of the intestinal Arteries: And therefore (they will say) all hot, sudorific Medicines must be very improper and pernicious, as they will necessarily aggravate those Circumstances. Now, the Plea I shall bring, either in Bar, or in Answer, to this Objection, is as follows; *viz.* First, such Ingredients as are of a diapho-

diaphoretic and sudorific Quality, are very mild and benign in their Nature, and therefore cannot enhance the Agitation and Ebullition of the Blood, in the manner it may be imagin'd. But, secondly, If they were even more harsh and violent, provided they are calculated to alter and correct, or to digest and concoct the venomous, morbid Humours, they would procure real and lasting Benefits; which would greatly overbalance those imaginary Evils, which exist only in Fancy or Fear. But I will endeavour to illustrate and verify this Argument, by a familiar Comparifon.

It is notorious, that Blisters (which are generally order'd for a *Delirium*) irritate and agitate the Fluids most violently; and sometimes they even cause a momentary Delirium, where none pre-existed: But, nevertheless, they are found, by Experience, to be the surest and speediest Cure for that Symptom. And this (doubtless) they effect, by first attenuating and resolving, and afterwards by drawing off and discharging, the peccant Humours.

C H A P. XII.

Of the COLICK.

THIS Disease is divided and distinguished into various Kinds; as, (for Example) the Wind-colic, the Humoural, the Hyfteric, the Nephritic, &c.

The *Causa proxima* of the *Wind-colic* seems so very legible, and easy to discern, that it scarce merits the Pains of inquiring into it. It infallibly consists either in Wind pent up and confin'd in the common Chancel of the Intestines; or else in the same, inflating and immoderately distending the Glands and Vessels of the Guts. But for the antecedent or most remote Cause,

Cause, we must look further back, and find out what is the generative Cause of this Wind. The generative Cause then or Causes most commonly productive of Wind, are, Indigestion, voracious Feeding, (especially upon Things in their Nature flatulent) or catching Cold.

Colicks of the Humoural Kind are most commonly the Offspring of catching Cold, or an habitual Adstriction of the cutaneous Glands: Though, sometimes, (doubtless) they proceed from acid or acrid Humours, either critically or accidentally determin'd on the Guts; where, stagnating in the capillary Arteries, or the Glands, or wounding the nervous Fibres of the Guts, they excite very severe Pains. When catching Cold, or habitual cutaneous Obstructions, are the Cause, we are to suppose the redundant Humours (which either one or the other will necessarily produce) are protruded, or thrust off, upon the Guts; where, stagnating in, and distending the Glands, and capillary Vessels, they excite Pain: And, according to the Figure, Quality, Solidity, and Magnitude of the obstructing Particles, the Pain will be more or less exquisite, permanent, and difficult of Cure.

Hysteric Colicks can only challenge one single Cause. And this is an impetuous Influx of animal Spirits; by which the Nerves are violently inflated, and immoderately extended in their Diameters, and contracted in their Length. But the Pain arising from hence is (strictly speaking) rather an hysterical Symptom, than a Colick.

What I am most surpris'd at, is, that Physicians of Sense and Learning should come into that erroneous Distinction of a Nephritic, or Stone Colick. This, in my Opinion, is a most egregious Mistake. That severe Fits of the Stone in the Kidnies do sometimes cause Vomiting, is certain; nor is it at all to be wonder'd at: But how they should cause the Colick, is to me (I confess) a Mystery. That this is a mistaken

taken Notion, is certain: And, I apprehend, the Mistake lies here; *viz.*

When (from a severe Cold, or any other Accident) superfluous Humours are accumulated first in the Blood, and are afterwards critically or accidentally determin'd and protruded, partly upon the Kidnies and adjacent Places, and partly upon the Guts; and because, in such a Circumstance, the Kidnies, and the whole Region of the Loins, are affected with a Heaviness and Pain, (as in a *Lumbago*) at the same time that the Bowels are colick'd from the same Cause; therefore it is, that the Kidnies are falsely charged with the Stone, and the Colick is unjustly construed as a Dependent on, or Consequence of it: When, in reality, it is nothing more than another Symptom, produced by a Part of the same specific Humours, only differently disposed. One would, from hence, almost infer, that these Gentlemen think the Kidnies are subject to no Sort of Pains, but the Nephritic.

The Indications of Cure, with regard to all these various Kinds of Colicks, are so obvious and clear, as to need no Explanation. Therefore I shall pass that Part by, and proceed to lay down Methods for their respective Cures. And, First, for the Wind-Colick.

Take carminative Decoction, oz. xiv. Caryocostin Electuary, oz. j. *Sylvius's* carminative Spirit, dr. iv. Oil of Juniper-berries, dr. j. Mix for a Clyster: To be given immediately, and to be repeated as Occasion requires.

Take Elixir Salutis, oz. viij. Linseed-oil, oz. ij. Yolks of three Eggs, Oil of Chamomile, gtt. x. Mix, and take three Spoonfuls every four Hours, shaking the Phial.

If the Pain increaseth very much, let the Sick take the following Bolus:

Take Philonium Romanum and Rhubarb, of each dr. ss. volatile Salt of Hartshorn, gr. viij. Oil of Chamomile-flowers, gtt. iv. Syrup of Mint, q. s. to make a Bolus.

For

For a Humoural Colic, attended with Costiveness.

Take Philonium Romanum, dr. fs. Rhubarb, and Species of Hiera Picra, of each gr. xv. Calomel, gr. xij. Oil of Sassafras, gtt. v. Syrup of Violets, q. f. to make a Bolus. To be taken presently, or at Bed-time; and to be repeated, as Need requireth.

Take Elixir Salutis, oz. vj. Linseed-oil, oz. iv. Yolks of two new Eggs, Tincture of Saffron, and Tincture of Elecampane-root, of each dr. iij. Mix, and take four Spoonfuls every three Hours, shaking the Phial.

If (notwithstanding the Use of these Things) the Pains should continue obstinate,

Take emollient and carminative Decoction, oz. xij. Sea-Salt, oz. fs. common Linseed-oil, oz. ij. Electuarium Catholicum, dr. vj. Yolk of one Egg. Mix for a Clyster: To be given as soon as possible, and to be repeated as Need shall require.

If this Kind of Colick is attended with Stools,

Take Rhubarb and Virginian Snake-root powder'd, of each scrup. ij. Zedoary and Ginger, of each gr. xv. volatile Salt of Hartshorn, gr. xxiv. Philonium Romanum, scr. iv. Oil of Aniseed, gtt. xx. Syrup of Poppy heads, q. f. to make four Bolus's: One of which is to be taken every sixth Hour; drinking after, six Spoonfuls of the following Julep:

Take Pennyroyal-water, oz. xv. Oil of Sweet-almonds, oz. iij. compound Aniseed-water, oz. iij. Yolks of two Eggs. Mix for a Julep.

Take carminative Decoction, oz. xij. *Lucatelli's* Balsam, oz. j. Dissolve in the Yolks of two Eggs, Venice-treacle, dr. iv. Mix for a Clyster: To be given at Night going to Rest, or when the Pain is most urgent.

Let Frictions be used often to the Region of the Belly, with woollen Cloths made warm, or rather dipp'd in any comforting Fomentation.

For an Hysterical Colick.

Take Cassumuniar-root, Valerian, and Virginian Snake-root, and Russia Castor, of each dr. fs. Troches of Myrrh, scr. ij. chymical

mical Oil of Rue, gtt. xx. Gum Sagapenum, scr. iv. Affafetida, scr. ij. Let them be beat into a Mass for fifty Pills; five of which are to be taken every four Hours, drinking after, four Spoonfuls of the following Julep:

Take Pennyroyal-water, oz. xij. volatile Salt of Hartshorn, dr. ss. compound Briony-water, oz. ij. Syrup of Mugwort, dr. xij. Tincture of Amber, dr. ij. Mix for a Julep.

Put burning Feathers, fetid Gums, or volatile Salts, to the Nose, as in other hysteric Disorders: For the general Intentions of Cure are always the same, as in common Hysterics; though Additions and Variations may be requir'd in our Applications.

For the Indications of Cure under this Symptom, I may refer to what is said of the *nervous Asthma*, p. 91. with which this exactly corresponds, in that Point.

As for the Colick attended with a *Lumbago*, and vulgarly call'd the *Nephritic*, or *Stone-Colick*.

This Kind of Colick, being more complex and intricate than the others, merits that we inquire a little into its curative Indications. And these are, to warm, attenuate and resolve the crude, stagnant Humours; and, at the same time, to lubricate and relax the obstructed Glands, and capillary Vessels, that their Contents may slip off with the greater Ease.

Take Milk of Sulphur, dr. iv. Saffron, dr. ij. Myrrh, and Russia Castor, of each dr. j. Rob of Juniper, dr. xij. Venice-treacle, dr. vj. Balsam Capivi, dr. ij. Mix for an Electuary; of which take the Quantity of a Nutmeg every fourth Hour, drinking after, oz. iv. of the following Apozem;

Take Decoction as for the Syrup of Marshmallows, lb. j ss. Manna, oz. ij. Oil of Sweet-almonds, oz. iv. Spirits of Sal Armoniac, gtt. cxx. Mix, and give it.

Take carminative Decoction, oz. xij. Honey of Herb-mercury, oz. ij. Venice-turpentine dissolved in the Yolk of an Egg, dr. vj. Oil of Juniper, dr. j. Mix for a Clyster; to be given when Occasion shall require.

I will

I will recite one Medicine, which I have often prescribed with admirable Success, in Cases of this Nature. It is as follows :

Take sweet Fenel-water, oz. viij. Elixir Salutis, and Linseed-oil, of each oz. iv. Balsam Capivi, dr. iv. Yolk of two Eggs, Oil of Juniper-berries, gtt. xl. Mix, and let the Sick take four Spoonfuls every three Hours, drinking after, a Draught of any diluting Liquor warm.

Some Constitutions are addicted to very frequent Returns of colicky Disorders; either from a very slight Cold, or indigested Meal. To such we advise Exercise, *Spaw* Water, and cold Bathing. To all which may be join'd the following; which will help a good deal.

Take Species of Hiera Picra, and Rhubarb, of each dr. iij. Species of Diambre, and the Powder of Roman Chamomile-flowers, of each dr. j ss. Extract of Centaury, dr. ij. *Mynsicht's* Tincture of Steel, q. s. to beat into a Mass for 120 Pills; five of which are to be taken every Morning, and at four o'Clock in the Afternoon.

C H A P. XIII.

Of a CHOLERA MORBUS.

THE Nature and Essence of this Disease (by which is meant nothing more than the specific morbid Humours that subtend and support it) are sufficiently express'd in its Name. And notwithstanding the many Difficulties and Dangers that some physical Writers discover in it, (who, I suppose, observe it through Optic-glasses of the multiplying and magnifying Kinds) I apprehend it may be very safely and easily cured by well-judg'd Applications.

The Disorder in question manifestly consists in a Surcharge of Choler, or choleric Humours. This thing,

thing, call'd *Choler*, is so like the Gall, both in its Colour and Taste, that I conclude it to be nothing more than a vitiated or polluted Bile. But, however, before we attempt to propose a Cure, it will be highly necessary to examine the Matter more nearly; and find out, if we can, what may be the Cause or Causes of the suppos'd Depravation or Pollution of the Bile.

The *Bile*, (then) or *Gall*, may be polluted and vitiated various Ways. And, 1st, It may be depraved, vitiated and polluted, by Gluttony or Drunkenness; or by a Surfeit of any kind, by what means soever it is brought on. 2^{dly}, By a gross, dense, impure Air. 3^{dly}, By catching Cold, or an habitual Constipation of the excretory Pores of the Skin. In a word: Whatsoever is capable either of augmenting the Quantity, vitiating the Quality, or of causing preternatural Agitations in the general Fluid, (whether it be Gluttony, Drunkenness, Surfeits, or the like) may possibly produce this Disease; especially, should the crude, unconcocted, or otherwise noxious Humours, be critically determin'd and protruded on the Gall-Bladder. But 'tis not sufficient to affirm dogmatically, that these are, or may be, the Parents of this Disease, without explaining by what Mechanism they beget it: Which shall be the Subject of my next Inquiry. And, First, as to Gluttony.

It is certain, beyond all Contest, that one single Debauch with Food, or voracious Meal, is capable of throwing the whole animal Constitution into a Flame. Its mischievous Effects are first displayed upon the Stomach and Guts; where it sometimes produces unnatural Commotions, inordinate Ferments, *Flatus's*, *Ructus's*, Gripes, colick Pains, Hiccups, Spasms, &c. By the time that a good Share of the undigested, unprepared Aliment, has passed the Lacteals, and made its Way into the Blood, it begins to display itself there too. When it has got Footing here, (besides feverish, spasmodic, and con-

vulvive Disorders, which are the more common and instantaneous Effects) it is capable of perverting and vitiating the whole System of the animal Juices, and of exciting in them preternatural Ferments, and inordinate Commotions. Now when the animal Fluids are thus vitiated, and their regular Œconomy thus confus'd and transpos'd, 'tis not improbable, (and much less impossible) but that the vitious Humours may be critically determin'd and thrown off upon the Gall-bladder, and adjacent Places. What (then) will be the Consequence? Why, the Bile (being vitiated in Quality, and augmented in its Quantity) will overflow its proper Bounds, and will dispense itself liberally to all the Parts adjacent; and, especially, to the Stomach and Guts. And here, by means of its Acrimony, and such other ill Qualities as it had lately acquir'd, it will stimulate and irritate all their Fibres and Nerves: It will reverse the natural Motions of the former, and so produce violent racking Pains, and incessant Vomitings of bilious, choleric Matter. Sometimes also they are accompanied with severe griping Stools: And these are the true genuine Symptoms, that constitute a *Cholera Morbus*. Sometimes, 'tis true, (and that not rarely) this Disease is attended with a Fever: But then the Fever is always symptomatical; especially if the *Cholera* preceded the Access of the Fever.

If a *Cholera* is produced from a Debauch with ardent, spirituous Liquors, it is brought about by much the same Mechanism as in the Case pre-supposed. If from catching Cold, an habitual Constipation of the excretory Pores, or from a foul, malignant Air; these various Causes (respectively) work, and produce the like Effect, by the same Mechanism; only differing in this, that these latter are extrinsic Causes, and come from without; whereas the others are from within.

Sometimes, indeed, the ill Humours generated from Cold, being critically determin'd on the *Primæ Viæ*,
shall

shall produce torturing Pains, and violent Vomitings; like as in a *Cholera*, though the Case be not really such. To confirm which Opinion, I will beg Leave to relate a short History of a Case——

Some two or three Years ago (and at a critical Season, *viz.* in the Month of *February*, when the Air was manifestly very bad and unwholesome, as appear'd by the Disorders it caus'd almost in every Constitution) I was consulted for a Patient under a Disorder of this Sort. He first perceived a great Weight or Oppression at his Stomach; which increas'd gradually, till it produc'd violent Strainings to vomit, attended with racking, burning Pains in his Stomach and Guts, down as low as to the Navel, his Belly at the same time constipated. I observed, that after (by violent Reaching for the Space of eight or ten Minutes together) he had discharged his Stomach of a greenish, phlegmatic Humour, in small Quantity, he became easy: But after an Interlude of Ease for half an Hour, (more or less) the Pains and Reachings recurr'd as before. And thus he continued in a regular Series of alternate Pain and Ease, till the Fumes of the Disease were either exhausted, or corrected and subdued. I order'd him (besides such other Medicines as I judg'd proper) to be ply'd well with warm, soft, diluting Liquids; especially, so soon as a Fit of Reaching and Vomiting was over. But whether he drank of such Liquids after the Fit, or not, the Consequence, I found, was much the same: For, after the mention'd Space of Time (*viz.* about half an Hour) the Pains, Reaching and Vomiting, return'd; and the Humour discharg'd, if not diluted, mix'd and masqu'd by foreign Liquids, was still the same as at first. Hence I took it for granted, that the morbid Humours (thus thrown up by Vomiting) were ingender'd or form'd by catching Cold, and a malignant State of the Air then reigning: That the same were critically determin'd and protruded by Nature, upon the Glands of the Stomach

and small Guts : That by means of violent Reachings the incumbent Humours were pump'd out of the Glands, and discharg'd by Vomiting : That after a Fit of Vomiting was over, morbid Humours were pour'd in afresh upon the Glands of the Stomach and Guts ; where they renewed and continued the Scene, till those likewise were expelled, as before ; and then the Patient was at Ease again.

The Methods I directed, were, (outwardly) Bathing in warm Water ; Rubbing the Belly, and Pit of the Stomach, with hot Flannels ; Glysters of the emollient Kind, and gently irritating : To be repeated every eight or twelve Hours. To be taken inwardly, I advise as follows ; *viz.*

Take Sena, dr. iij. Aniseed, dr. ij. Let them be boil'd in q. f. of Water, to oz. xij. when strain'd : To which add Manna, and Oil of Almonds, of each oz. iij. Yolks of two Eggs. Mix for three Spoonfuls : To be taken every Hour.

By the Use of these Things, and Plenty of soft, diluting Liquids, Stools were obtain'd ; and the Pains and Reachings went intirely off, in the Space of forty Hours, or thereabouts, and the Patient went abroad about his Business. But, in three or four Days time afterwards, the Distemper recurr'd. It appear'd exactly in the same Shape ; went off in the same Manner, and in about the same Space of Time as before. The Complaint return'd a second time, in the Space of three or four Days after his Recovery from the second Seizure : And, I think, a third ; though I cannot be positive as to that, because he was then removed to a distant Place. — From what has been said, it appears (I think) that this Distemper greatly resembled a Quartan-ague, as to its Periods and Returns. But how are we to account for all this ? Why, we must suppose, either that the Patient got Cold afresh, (which would necessarily terminate as before) and so renewed his Pains and Penalties ; or else, that, by the late Fit, (that

(that is, a total Fit of the Disease) the Blood had thoroughly cleansed and freed itself of the ill Humours it had contracted. But then, the antecedent or original Cause yet subsisting, *viz.* the Air continuing in a malignant State, and the excretory Pores of his Skin obstructed, fresh morbid Matter was gradually accumulated, and heaped up in the Blood, till there was sufficient to produce another Paroxysm. Now, observe well the Difference here: When the Blood had thoroughly purg'd and discharg'd itself of the incumbent ill Humours, three or four Days were required to furnish as much new Matter, as was sufficient to produce and form a Paroxysm. But, on the other hand, when (in the Circumstance of a Fit) the Stomach and Guts had discharg'd themselves of what offended them, they were supplied afresh from the Blood, in half an Hour's time. And this may serve to explain, that the Times required to produce those opposite Causes of Diseases, (call'd the antecedent and contingent) are greatly disproportionate, the one to the other. But I beg Pardon for this long (though, I hope, not unreasonable) Digression, and return to my Subject.

The Indications of Cure, in a *Cholera*, are these: *viz.* 1st, To deplete the Vessels, by Bleeding in the Foot, preferable to the Arm; and to wash the Stomach with a gentle Vomit. 2^{dly}, If the Patient has frequent griping Stools, to sheath and defend the Guts by emollient, oily Glysters: But if (on the other hand) he should be costive, to invite Stools by Glysters that are powerfully emollient, and gently irritating. 3^{dly}, After the Stomach has been cleans'd by a convenient Vomit, all Endeavours must be used to relax and unbind the Glands and Vessels of the *Primæ Viæ*, which are generally too tense and rigid in this Distemper. 4^{thly}, Either to absorb, or alter and correct; or else to obtund and sheath the sharp, irritating, choleric Humours: For, by humecting, and relaxing the Glands, and capillary Vessels, of the *Primæ Viæ*, the

morbid Humours will slip off more easily and freely, and with less Offence and Violence to the Parts that contained them. If frequent and painful Stools urge, as well as Vomiting, it would be vain and preposterous to attempt restraining either one or the other: On the contrary, they ought both to be rather encouraged (but facilitated) by such Things as line, lubricate, and defend the Stomach and Guts; that so the Humours may pass off with as little Offence as possible. And this View ought to be pursued, till the Stock of morbid Humours seems to be spent.

Moreover, due Regard must, at the same time, be had to the Blood; that its preternatural Ferments, and inordinate Commotions, be reprov'd and suppressed; and, lastly, that such ill Humours as are either impress'd on it from without, or else generated in it, be either concocted, or otherwise corrected, or else discharged. These are all the requisite Indications, supposing the Disease to spring from an internal Cause, such as Gluttony, Drunkenness, or the like. But if it proceeds from catching Cold, or an habitual Constipation of the excretory Pores, something further will then be required: *Ex. gr.* We must unlock the obstructed Pores by hot Baths, applied outwardly; and by gentle diaphoretic or sudorific Medicines, inwardly. And, to execute all these Intentions, I advise thus; *viz.*

In the first Place, take away oz. xij. of Blood from the Foot.

Take Ipecacuana, gr. xv. Oxymel of Squills, oz. j. Baum-water, oz. j ss. Make a Potion: To be taken in the Evening; drinking plentifully of thin Gruel between the Vomittings.

Take Lac Sulphur and Sperma Ceti, of each dr. iij. Aniseed in Powder, *Bates's* Pulv. Pepticus, of each dr. j. Conserve of Mallows, oz. ij. Syrup of Marshmallows, q. s. to make an Electuary: Of which take the Quantity of a Nutmeg, every third Hour; drinking after, oz. iv. of the following Emulsion:

Take Linseed, and white Poppy-feed, of each oz. j. white Sugar-candy, oz. j ss. Beat them well together; then add
Sweet-

Sweet-almonds skinn'd, oz. j. ss. Beat them again, and pour on by degrees two Pints of the following Decoction, cold; to which add clarify'd Honey, oz. iij. Make an Emulsion, to drink also for common Drink.

Take the five opening Roots, of each oz. j. Colts-foot-leaves, and true Maiden-hair, of each m. j. Boil them gently in q. s. of Whey to three Pints, when strain'd, for the fore-mentioned Use.

If attended with racking Pains in the Guts, with Costiveness,

Take strong emollient Decoction, oz. xij. Sal Gem, dr. ij. Linseed-oil, oz. ij. dissolved in the Yolk of an Egg, to make a Glyster; to be given every Night and Morning.

If severe griping Stools attend,

Take emollient Decoction made strong, oz. xij. *Lucatelli's* Balsam, oz. j. dissolved in the Yolks of two Eggs; Linseed-oil, oz. ij. Make a Glyster: To be given Night and Morning, if needful.

It will be convenient to repeat the *Emetic* every Evening; especially during the Continuance of the softening, humecting Medicines; for those will not only render its Operation more easy, but will greatly contribute to its good Effects likewise.

For a Person that is costive under these Circumstances, it will be proper to leave out one Half of the *Conserve of Mallows*, in the Electuary; and to substitute, in its Place, *Pulp of Cassia*, oz. j. and *Oil of Aniseed*, gtt. xx.

When the burning Pains and Vomiting are gone off, or much abated, the Sick may proceed with the following:

Take Lac Sulphur, and white Amber prepar'd, of each dr. j. ss. Rhubarb, dr. j. white Sugar-candy, dr. ss. Oil of Aniseed, gtt. x. Mix for a Powder, to be divided into six Papers; one of which is to be taken every six Hours, drinking after, a Draught of the following Apozem:

Take Raisins sliced, oz. iv. Spanish Scorzonera-root, oz. ij. Roots of Sarsaparilla and China, of each oz. j. Juice of Liquorice, dr. vj.

dr. vj. Let them be boil'd in q. f. of Water to lb. ij. when strain'd; to which add Elixir Salutis, oz. iij. Mix for Use.

When the Origin of this Disease is from without, that is, proceeds from catching Cold, or an habitual Constipation of the excretory Pores, I recommend as follows:

Take Lac Sulphur, dr. iv. Root of Contrayerva powder'd, and Gum Guaiacum, of each dr. j. Rob of Elder, oz. ij. Syrup of Clove-gilli-flowers, q. f. to make an Electuary; of which the Quantity of a Nutmeg is to be taken every sixth Hour, drinking after, a Glas of the following Apozem:

Take Eryngo-root candy'd, and Spanish Scorzonera, of each oz. j ss. Sarsaparilla and China, of each oz. j. Juice of Liquorice, dr. v. Aniseed and Coriander, of each dr. iij. Let them be boil'd in q. f. of Water to two Pints, when strain'd; to which add volatile Sal Armoniac, dr. j. Mix.

N. B. This last Method is not to be put in Practice till the Stomach is brought to a proper Temper of bearing them; which must first be acquired by the Use of the preceding Course.

These Methods, respectively used, according as the original Cause of the Disease may vary, will very seldom fail of effecting a happy and speedy Cure; even without any other Assistance whatever.

The Liquids proper for common Drink, are, small Chicken-broth, with Pearl-barley boil'd in it; or Water-gruel, with Raisins boil'd in it; or, lastly, the following:

Take the five opening Roots, of each oz. ss. Let them be boil'd in three Pints of Sack-whey, to the Consumption of a third Part; of which drink plentifully, made warm, and sweetened with clarify'd Honey.

Be it observ'd, when Costiveness is a Symptom of this Disease, it is very seldom cured, or even much asswaged in its Violence, till that Obstacle is removed. Therefore, should it obstinately resist the Force of the Glysters, and other soft, cathartic Medicines,
above-

above-described, recourse must then be had to something of a more prevalent Nature; to which End I advise as follows:

Take medicinal Antimony, from gr. xij. to gr. xx. Pulp of Cassia, dr. iij. Make a Bolus.

It will be proper to give this Medicine immediately after the Stomach has emptied itself by Vomiting; and to repeat it once a Day, gradually augmenting the Dose, as Occasion shall require: But the Preparation made use of here, should have remained in Fluxion an Hour; by which it acquires a stronger purgative Quality.

C H A P. XIV.

Of the VOLVULUS, or ILIAC PASSION.

THOUGH these two Diseases have obtained different Names, and do really differ, in some measure, as to their Form and Extent; yet are they the same in Nature and Essence; are both derived from the same specific Cause, and will be soonest and best cured by the same Remedies.

The Iliac Passion can only proceed from ill Humours, of a very acrid, pungent Nature; which (being accidentally or critically determined upon this Gut) irritate and vellicate its nervous Fibres to so great a degree, as to throw it into convulsive Contortions; by which means its Valve is inverted, and all Passage downwards prevented. Now, a *Volvulus*, or Twisting of the Guts, is produced from the same Cause, and brought about by the same Mechanism; only this occupies a larger Space, that is, it affects several Guts at once, and makes them twist and entangle together.

It

It must appear, I think, (to any well-judging considerate Person) morally, if not absolutely impossible, that either one or other of these Disorders could be produced from any other Cause, or be brought about by any other Mechanism, than that I have assigned.

Therefore, resting perfectly satisfied, as to the Cause; we proceed to consider the Intentions of Cure: And these are, first, To lubricate, relax, and soften the rigid State of the intestinal Fibres: *2dly*, To correct and alter the Quality; or else to digest or comminute, break to pieces, and destroy the Substance of the morbid Humours: Lastly, to force down, and reinstate the inverted Valve; or to restore the Guts to their natural State and Order in the *Volvulus*, by means of some very ponderous and fluid Body.

To answer and effect these Purposes, either in one Disease or the other, I recommend as follows:

Take emollient Decoction, made strong, oz. viij. Sea Salt, dr. iij. Linseed-oil dissolved in the Yolk of an Egg; Honey of Herb Mercury, of each oz. j. Mix for a Glyster, to be given twice or thrice a Day.

Let the Sick often use a *Semicupium*, or rather warm sulphureous Baths: And as for internal Remedies, let him use the following:

Take *Æthiops mineral*, dr. j. prepared with two Parts of Milk of Sulphur, and one Part of Mercury. Gum Guaiacum, gr. x. Camphor, gr. v. Pulp of Cassia, dr. j. ss. Oil of Aniseed, gtt. v. with q. f. of Syrup of Marshmallows. Make a Bolus, to be taken every sixth Hour, drinking after, oz. vj. of the following Apozem:

Take the five opening Roots, of each dr. vj. Spanish Liquorice sliced, oz. j. Colts-foot, m. j. Let them be boiled in q. f. of Water, to lb. ij. when strained; to which add Manna, oz. ij. Linseed-oil cold-drawn (dissolved in the Yolks of two Eggs) oz. iv. Mix, and give it.

If to the Virtues of these Medicines one Disease or another doth not give place, we must have recourse to Quicksilver; of which let the Sick swallow down such a Quantity as shall seem necessary to the Judgment of the Physician.

If we may credit some Writers, concerning the Quantities of this last Remedy given for either of these Diseases; some Pounds of it have been swallowed at a time.

I have been very brief in my Explanation upon these Diseases, and somewhat confined in my Prescriptions; but nevertheless, I apprehend scarce any thing can be better concerted to answer the Indications I have laid down, and to effect an happy and speedy Cure, than the Remedies I have proposed.

It is to be observed, I have ordered no strong, irritating Cathartics; and my Reason for it is this: Such Medicines could have neither Authority nor Power enough to force down the inverted Valve in the Iliac Passion, or to disentangle the Guts in the *Volvulus*: And as therefore they would be confined above the Seat of either Disorder; so consequently by their Irritation, they would rather increase the Disorders, than cure them: However, besides the *Æthiops*, some other soft Preparations of Mercury may be used, if the Physician pleases; such, *ex. gr.* as *Panacea Mercur.* Calomel, or my Electuary of Quicksilver. But then 'tis plain, (I think) that they must pass through the Lacteals, go the whole Course of Circulation, and finally act upon the Humours, in their stagnant, obstructed State, before they can avail in the least.



C H A P. XV.

Of the Dry BELLY-ACH.

THIS Distemper is, more or less, the Growth of every Country and Climate: But if we may credit the Reports of Voyagers, it is more especially and generally the Product of hot Climates. We are told and assured, that the Inhabitants of the *Torrid Zone* are very subject to it: That to many of them it proves fatal; and many others yet (who have the good Luck to survive it) it renders Cripples, by depriving them of the Use of their Limbs.

Punch (the common *Breuvage* of those Countries) stands charged with being the chief Author of this Calamity: But, to give my own private Opinion of the Matter; I apprehend (as I have observed elsewhere) that it does not so much proceed from any ill or noxious Qualities in that Liquor, as from an Excess in the Quantity; as also from the Injuries (I mean of Weather) which People are exposed to, who commit Debauches with it. I have (upon another Occasion) explained at large, why People are more susceptible of catching Cold, under an Evening's Debauch with this, or indeed any other spirituous Liquor, than they would be in a State of Temperance: But the Injuries of catching Cold, and the Inclemencies of Night-air, Damps, &c. apart; Inequalities in our natural and necessary Secretions, (especially that of Perspiration) which by this Practice of Intemperance and Debauch are kept in a State of reciprocal Ebbing and Flowing, are enough to ingender ill Humours of various Kinds: However, I cannot so far exculpate *Punch*, as not to allow, that frequent Debauches committed with it, may prove more pernicious

nicious to our Constitutions, than equal Excesses in any other Kind of spirituous Liquor.

The antecedent or most remote Cause, then, of this Disease is, generally speaking, founded in Intemperance. But besides this, all Errors whatsoever, either in our Accretions, or our Secretions, may give Birth to the same. Hence it appears, that the mediate Cause of this Complaint always consists in ill Humours, which are ingendered in our Blood, either by Excess, or Accident; and the accidental or critical Determination and Stagnation of these Humours, is the *Causa proxima*, or immediate Cause.

The Nature, then, of this Disease, consists in Pain and Obstruction; that is, a total Obstruction or Constipation of the Guts; but its Essence exists in ill Humours (whether acid or acrid, I will not venture to say) seizing on, and obstructing the excretory Glands of the Part affected, *viz.* the lower and larger Intestines.

The exquisite Pain which usually attends, and in part specifies this Disease, results from the exalted Acrimony of the morbid Humours; and its Obstinacy, or Difficulty of Cure, depends on their particular Texture and Solidity.

The Indications of Cure, then, are plainly these; *viz.* First, To relax and open the Belly: *2dly*, To alter and correct; to digest and concoct; or to break, divide, comminute, or dissolve, the stagnant, peccant Humours: *3dly*, and lastly, To expel and discharge the same.

To answer these Intentions, I recommend, as follows:

Take strong emollient Decoction, oz. xij. Electuarius catholicon, oz. j. Sea Salt, oz. ss. Linseed-oil dissolved in the Yolk of an Egg, oz. ij. Mix for a Glyster, to be given every Night and Morning, so long as Need shall require.

Take antimonial Æthiops, dr. ij. Gum Guaiacum, Milk of Sulphur, of each dr. j ss. Rob of Juniper, and Pulp of Cassia, of each

each oz. j. Oil of Aniseed, gtt. xx. Mix for an Electuary: Dose dr. ij. every six Hours; drinking after it, eight Spoonfuls of the following Apozem:

Take the five opening Roots, of each oz. fs. Mechoacan and Hermodactyls, of each dr. ij. Let them be boiled in q. f. of Water, to oz. xx. when strained; to which add, Calabrian Manna, oz. ij. Linseed-oil, cold-drawn, oz. iv. and Yolks of two Eggs. Mix.

Take Species of Hiera Picra, dr. fs. Calomel and medicinal Antimony, of each gr. xv. Oil of Aniseed, gtt. v. Balsam Capivi, q. f. to make a Bolus, to be taken every second Night, going to Bed.

N.B. The antimonial Preparations used here, ought to remain in Fluxion for a whole Hour.

If the Disease should obstinately resist the Force of the above Remedies, (which I promise myself will very seldom happen) recourse must then be had to our Electuary of Quicksilver, &c. And upon this account its Dose may be gradually augmented, from three Drachms to six or eight, if occasion be.

There are frequent Instances of Persons, who (having survived this Distemper after a long, lingering Fit of it) are deprived of the Use of their Limbs: In such Cases we have Reason to suspect, that the morbid Humours are translated from the Guts to the extreme Parts; or else, that some Remains of the same specific Humours (which till then had continued blended with the Blood, and circulating with it) were (as it were) concentrated and determined upon the respective Parts.

In such Circumstances, therefore, the above Method will be extremely proper and useful; omitting only the Linseed-oil, Balsam Capivi, and Glysters: But this Disorder, however, so much deserves our strict Attention, and best Endeavours, that I will give an express Form for it.

Take antimonial Æthiops, dr. iv. Gum Guaiacum, and Milk of Sulphur, of each dr. iij. Russia Castor, dr. j. Rob of Elder,
oz.

oz. iij. Syrup of the same, q. s. to make an Electuary, of which take dr. ij. thrice a Day, when not taking Purges; and let be drank after it, oz. vj. of the following Decoction:

Take Lignum Vitæ, oz. ij. Roots of Sarsaparilla and China, of each oz. j. Coriander-seed and Liquorice-root, of each dr. iv. Mix, and boil gently in q. s. of small Lime-water, to lb. ij. adding towards the End of its boiling, Juice of Scurvygrass, oz. xij. Strain, and fine for Use.

Take Calomel, and Species of Hiera Picra, of each scr. j. Diagrydium, gr. viij. Flowers of Antimony and Euphorbium, of each gr. j ss. Mix; and with a few Drops of Spirits of Wine, make five Pills, to be gilt; to be taken every fifth or sixth Day, early in the Morning.

Morbid Humours that are thus determined, and lodged in the extreme Parts of the Body, are not found to excite any great Degree of Pain; because those Parts are not of such exquisite Sensation as the Guts. But besides this, another Reason may yet be assigned: For 'tis possible, that the supposed morbid Humours, when determined and lodged upon those Parts, may in great measure have been divested of their Sting; that is, their acute Angles, or sharp Points, may be rendered somewhat obtuse, by their long Circulation, Mixture, and Collision with the common Fluid, the Blood. However, it appears they have still Force enough left, to stimulate and contract the Nerves, Fibres, Ligaments, and Tendons of the Parts where they have made a Lodgment.

If the Method I have expressly calculated for this Disorder, should fall short of a perfect Cure, I must then (as before) refer to the Electuary of Quick-silver, or to the Use of natural, hot, sulphureous Baths.



CHAP. XVI.

Of a FAMES CANINA.

THIS Disease is expressed, partly by an incessant, voracious Desire of Eating, and partly again, by a Corruption or Depravity of the Appetite; which (like Dogs) inclines the distempered Person to eat Offal or Carrion, rather than stick out.

It is chiefly on account of this latter Circumstance that it is styled a Dog-like Hunger.

The antecedent Cause or Causes of this Disease are, whatsoever may subvert or vitiate the natural Ferments of the Stomach, and generate or produce acrid, corrosive Humours in it. The mentioned ill Humours may either be ingendered immediately in the Stomach itself, (by the supposed Vitiation and Perversion of its natural Ferments) or else they may be thrown off from the Blood upon the Glands of the Stomach, where, by irritating the nervous Fibres and inner Coat of the Stomach, they may excite Appetites and Desires as corrupt and vitious as themselves.

The Essence, then, of this Disease, consists in acrid or corrosive Humours, gnawing, irritating, and fretting the inner Coat and nervous Fibres of the Stomach. The Intentions of Cure are, To correct or discharge the noxious Humours; and to restore the natural Ferments of the Stomach.

These Intentions will (in my Opinion) be most easily and effectually answered, by drinking the Waters of hot, sulphureous Springs; *Ex. gr.* those of *Bath*, or *Aix-la-Chapelle*: And next to those, the following Method may (I believe) take Place:

Take

Take alkalized Mercury, dr. iv. Rhubarb, dr. ij. Conserve of Scurvygrafs, oz. j. Make an Electuary; of which take dr. ij. for a Dose, twice a Day, drinking after, a large Draught of Decoction of the Five opening Roots.

Or otherwise,

Take our Electuary of Quicksilver, dr. ij. for a Dose, to be taken every Night and Morning, when the Patient hath not taken a Purge; but every fourth Morning let the Sick take dr. j. of Rhubarb, with a Draught of any Liquor.

C H A P. XVII.

Of HYPOCHONDRIAC DISEASES.

THIS Disease exhibits almost as many different Shapes and Appearances in Men, as Hysterics do in Women; and yet, all those various Appearances (which the Hypo subtends in various Subjects) proceed from one and the same specific (though mediate) Cause.

This same mediate Cause is judged to consist in a heavy, grumous, viscid, melancholy State of Blood, which either stagnates in the hypochondriac Regions, and other *Viscera*; or else moves too sluggishly thro' their Vessels.

That the Habit of Blood just now mentioned, and its Stagnation, Obstruction, or too heavy and sluggish Motion, constitutes the Essence of the Disease in question, can, I think, admit of no Dispute: But how, and by what Mechanism, the supposed Habit of Blood, its Stagnation, Obstruction, or the like, should deprave and pervert the Œconomy of the Mind to so great a Degree as to produce those surprising *Chimera's*, and whimsical Imaginations, which the diseased Persons sometimes manifest; this is the

great Question! And it is what I believe will be found none of the least difficult to explain and account for.

The Blood stagnating in the *Hypochondria*, Spleen, &c. a consequent Obstruction of the said Parts may (indeed) hinder the Influx and Action of the animal Spirits into those Parts respectively; and thence (as the animal Spirits are the *Medium* betwixt the Mind and Body) the Functions of the Mind may be render'd dull, heavy, and intractable; and perhaps somewhat irregular otherwise. Thus far I can easily conceive of the Matter: And that this is the common Opinion People have of it, is plain; for when any Person is dull, heavy, and stupid, (the necessary Effects of a heavy, gross State of Fluids) 'tis immediately pronounced upon him, that he has the Spleen; by which it is plainly meant, that the Spleen is at that Time supposed either to be obstructed or oppressed by the Weight of the incumbent Blood moving too heavily and lazily through its Vessels: And the like Effects may result from the same Cause, inhering in others of the *Viscera*: But then the Functions of the Mind may be clogged and depressed, without being depraved and perverted.

These miserable Effects then must necessarily result from some other Cause, besides Stagnation and Obstruction: The Blood must certainly abound with some preternatural, noxious Humours, which irritate the Brain in the Course of their Circulation, confuse and transpose the regular Order and Motions of the animal Spirits; and so finally affect the Mind itself, which the animal Spirits immediately subtend and support; or otherwise the stagnant Blood and Humours may send up some putrid, vitiated Fumes to the Brain, which may act upon it in such manner, as to excite very unnatural and surprising *Chimera's* in the Mind.

It may give a good deal of Strength and Weight to this Conjecture, if we consider, that these dismal, melancholy Conceptions and Imaginations have, generally speaking, their regular Periods of Access and Duration.

I have known some Persons (under this unhappy Predicament) who have been most miserably harassed with unaccountable depraved Fancies and Conceits, which had no manner of Existence, but in their Brains. And furthermore, these depraved Fancies have had their Beginning, State, and Declination, as it were a Fit of the Gout: Hence it will appear reasonable to judge, that when a sufficient Stock of noxious Humours, or Fumes and Vapours, were accumulated in the Blood, a Paroxysm succeeded: And when the supposed Humours or Vapours were either dissipated, or their Force and Action destroyed by Time or Medicine; then the Fit went off, and the Person recovered his right Reason; or, to speak more properly, Reason then resumed its Empire.

In others again, those irksome, corroding Imaginations continue for Years together, with little or no sensible Intermission.

In such a Case we must suppose, that a fresh Stock of morbid Matter daily vegetates and grows in the Constitution, in proportion to what dissipates and wears out — I say, dissipates and wears out; for, all morbid Humours, except only such as terminate in a *Calx*, (as it frequently happens in the Gout) are in time (by the continued Action of the Fluids, and Vibration of the Solids upon them) so comminuted and subtiliz'd, as to fly off by Perspiration, or otherwise. They may be so far digested and concocted, or dissolved and liquified, as to be reclaimed by the Blood, in the Course of Circulation, and afterwards thrust off by some Secretion. Now when the particular Shape and Substance of morbid Humours are

thus alter'd and destroyed, they are then worn out: And it is in that Sense, and no other, that any thing is said to be worn out; for nothing in Nature can be annihilated.

Thus far of the Causes (mediate and immediate) and of the Nature and Essence of this Disease: We shall now look further back, and inquire what may be its antecedent or most remote Causes.

These (as I apprehend) consist either in a bad, unwholesome Air; or else in an Abuse of the Non-naturals: And it will be allowed me, (I presume) that hypochondriac Disorders may (as well as an Infinity of others) spring from those original Causes.

The Basis and Essence which I have assigned to this Distemper, being granted, and allowed to be just, will be a good Light and Guide to direct us concerning the Methods of Cure. Indeed, that is the general and chief Design of this Undertaking; *viz.* That by explaining the true Causes, Nature, and Essence of each Disease; as also their respective Intentions or Indications of Cure, upon the Principles of mechanical Reasoning; we may thence be the more easily and safely conducted and guided in the Business of Curing.

From what has been said, it appears plain, that the Indications of Cure are as follow; *viz.* first, To attenuate and resolve, to rarefy, and invigorate the Blood: 2^{dly}, To correct and subdue, or extirpate and expel, the noxious, irritating Humours: 3^{dly}, To reprove and suppress all noxious Fumes and Vapours: And lastly, To regulate and strengthen the natural Actions of the animal Spirits, and to restore the just Operations of the Mind. To answer which Purposes, I direct as follows:

First, take away oz. x. of Blood from the Arm.——
Then

Take antimonial *Æthiops*, dr. v. Gum Guaiacum and Rhubarb, of each dr. ij. Russia Castor and Cassumuniar-root, of each dr. j.

dr. j. Extract of black Hellebore, dr. ij. Mix all together with q. s. of Tincture of Virginian Snake-root, beat into a Mass for 120 Pills; five of which are to be taken thrice a Day, drinking after them, six Spoonfuls of the following Liquor:

Take the Juices of both Scurvygrasses, Brook-lime, Water-trefoil and Seville Oranges, of each oz. viij. Mix and filtre through Paper, and to every Pint add Viper-wine, oz. v. and give it.

Take Glass of Antimony finely levigated, gr. x. Panacea of Antimony, scr. j. Strained Gum Ammoniac, dr. j. which beat into a Mass, for 30 Pills; whereof two, three or four are to be taken every sixth Night, (according to their operating) and in place of the Pills above-written.

Let be continued the Use of these Medicines for 40 or 60 Days, and then proceed to the Use of the following Things.

The preceding will suffice to attenuate and resolve; to break and comminute the gross, viscid Humours; and consequently to remove Obstructions. And furthermore, they will correct all preternatural and offensive Irritations.—Thus the first and second Intentions will be answered; and for the third and fourth, I recommend the following; which, I promise myself, will prove no less effectual, to answer the Ends proposed by them.

Take Rust of Iron, dr. vj. Arum-root, of the Species of Diambre, and Powder of Galangal, of each dr. ij. Candied Nutmeg, oz. ij. Syrup of the same, q. s. to make an Electuary, of which take dr. ij. for a Dose every Morning, fasting, and every fourth Hour in the Afternoon, drinking after, six Spoonfuls of the following Infusion:

Take Leaves of Roman Wormwood, oz. j. Dried Orange-peels, Spanish Angelica-root and Satyrion, of each oz. ss. Zedoary and Winter's Cinnamon, of each dr. iij. Smaller Cardamum-seed, dr. ij. Let them be infused in two Pints and a half of White-wine (in a strong Heat, and the Vessel well closed) for 12 Hours; then strain, and gently press the Ingredients; and to every Pound of the Clear add Viper-wine, oz. iij. Chalybeat Wine, oz. j ss. Mix, and give it.

Take Virginia Snake-root powdered, scr. j. Volatile Salt of Vipers, gr. x. Confection of Alkermes, q. s. to make a Bolus, to be taken every Night, going to Bed.

Some Writers are very copious and prolix in treating of this Distemper, and are no less confused than multiform in the Remedies they lay down for it; so that this single Subject is spun out to the Measure of a Volume, sometimes: And, indeed, if an Author should give an historical Legend of all its various Shapes and Symptoms, as it appears in different Subjects, and could afterwards consider every particular Shape and Symptom apart, and direct a distinct and separate Method of Cure for each, he might easily protract it to a Volume.

But this would be intirely foreign to my Design; which is only to explain the true Causes, Nature and Essence of hypochondriacal Symptoms, be they what they will. And as they all proceed from the same Causes, (antecedent and mediate) or nearly so; only differently situated and disposed; so I have directed one general Method for the Cure of them all—and, for ought I know, that may be as good as a thousand.

C H A P. XVIII.

Of Affections of the LIVER, SPLEEN, PANCREAS, *and* MESENTERY; *as*, Obstructions, Pains, Tumefactions, Inflammations, Ulcerations, *and* Scirrhus's.

TH E S E Bowels (especially the three former) are subject to all this Tribe of Disasters.

Obstruction leads the Van: To that succeeds Pain and Tumefaction, according to the Quality, Quantity

tity and Disposition of the morbid Humours. These (*viz.* Pain and Tumefaction) sometimes terminate in Inflammations and Abscesses; at others, in Scirrhoties, though sometimes, doubtless, they are resolved and removed.

The Mesentery is not so subject to Scirrhoty as the Liver, Spleen, and Pancreas (though ancient Writers affirm to have found it scirrhus sometimes); because it is not (properly speaking) carnos, but a vascular, glandulous Part: However, in place of Scirrhoties, this is subject to Infarctions.

All and each of these Bowels may be affected with these Disorders, from one and the same Cause: Likewise, one and the same Cause may produce all this Train of Effects in one and the same Part, the Scirrhus only excepted: For, the same Kind or Quality of morbid Matter, that necessarily tends to produce Inflammation and Abscess, cannot, in equal Probability, tend to the Production of Scirrhoty. And the Reason of this will appear plain, if we consider, that such Humours as most necessarily tend to produce Inflammations and Abscesses, are of the viscid and fizy Kind, are highly tenacious, and have a strong, mutual Adhesion to each other. On the other hand; such as tend to produce Scirrhoty, are retaining to the acrid, adust, and petrescent Sort.

I shall not (in accounting for these various Disorders) attempt to give a long, tedious, anatomical Disquisition of the particular Parts, and their respective Offices or Functions. That, I think, would at this Day be intirely unnecessary on the one hand; as it is perfectly foreign to my Design on the other.

It is sufficient to know, that these Bowels are (in Part) constituted of Blood-vessels and Glands: And moreover, that some of them are the proper Receptacles of certain excrementitious Parts of the Blood, and Chyle. However, I shall neither have regard to these last-mentioned Circumstances, nor consider

them in the least, as Causes of the mentioned Disorders: But thus I consider, judge, and conclude; *viz.* That the Cause or Causes existed previously in the Blood; that is, That the Blood and Humours were previously vitiated in one or other of the respects above-mentioned. Now, this being granted, it will necessarily follow, that the supposed morbid Humours (more or less of them) might either obstruct or stagnate in the Parts, in the Course of their Circulation; or else, might be critically determined and deposited there: And be it which it will, the Effect will be the same, or nearly so.

That these Disorders depend upon a bad Habit of Blood, and are likewise accompanied with it, (which I take to be of the scorbutic Kind) is pretty plain from the other Circumstances that either present at the same time, or commonly ensue; and these are, feverish Disorders, Hectics, Atrophies, *Marasmus*, Fistula's, Dropsies, and the like. Some, perhaps, may object, that these latter result simply and solely from the supposed Distemperatures in the *Viscera*. But I judge, (and presume to say) that they flow from the same Causes, (*viz.* antecedent and mediate) from whence those did.

Wheresoever these Disorders are seated, (whether in the Liver, Spleen, Pancreas, or Mesentery) the Intentions and Methods of Cure will be pretty much the same, and are as follow; *viz.* When a Pain and Tumour are perceived in any of the mentioned Parts, (which always suppose Obstructions) the Intentions are, first, To attenuate and resolve, or to digest and concoct, the stagnant Humours; and then, to discharge them by some Secretion; of which those by Stool or Urine are the most suitable and proper — To answer which Purposes;

Take antimonial *Æthiops*, dr. iv. Martial diaphoretic Antimony, dr. ij. *Poterius's* Antihectic, and Rhubarb, of each dr. ij. Conserve of Mint and Scurvygrass, of each oz. j ss. Syrup of the
Five

Five opening Roots, q. s. to make an Electuary; Dose dr. ij. thrice a Day, drinking after, oz. iij. of the following Liquor:

Take Juices of both kinds of Scurvygrasses and of Brook-lime, of each oz. xv. Arum-root well dried, dr. iv. Cream of Tartar powder'd, dr. x. Let them be boiled gently, continually stirring, one Quarter of an Hour; then strain and filtre, and to every Pint add Ens Veneris, dr. fs. Mix, and give it.

Another Method :

Take Rust of Iron in fine Powder, and white Sugar-candy, of each dr. iv. Let them be rubbed together in a Mortar to a subtle Powder; to which add, Species of Diambre, and compound Powder of Arum-root, of each dr. ij. Vitriol of Steel, scr. ij. Rob of Juniper, oz. ij. Syrup of Steel, q. s. to make an Electuary; of which take dr. iij. twice a Day; drinking after, oz. iij. of the following Mixture:

Take Juices of both Scurvygrasses, of Water-trefoil, and of Seville Oranges, of each oz. x. Mix and filtre, and to every Pint add, Viper-wine, oz. iij. Chalybeat Wine, oz. j fs. Mix, and give it.

Take *Ruffy's* Pill, dr. ij. *Matthem's* Pill, scr. ij. Make 30 Pills; five of which to be taken every Night, going to Bed.

Either of the above Methods will, in high Probability, do the Business, provided the Disorder extends no further than to Pain, Obstruction, and Tumefaction of the Parts. But, if an Inflammation is suspected, the first Method is then to be preferred; and if an Abscess is formed, the last: As also, the first Process is better adapted for Scirrhoties; and the last, for Infarctions of the Mesentery.

Either of these Methods ought to be preceded by Bleeding in the Arm; or by Cups, applied as near the distemper'd Part as possible. Not that Bleeding can mend the Habit of Blood, or can reasonably be supposed to remove the Obstructions, Pain, &c. but only as it may be accessory to the better Success of such Remedies as may be applied after.

Some

Some Practitioners depend much upon Clysters in these Sort of Disorders.—Such (when applied) should be of an aperient, resolvent, discutient Nature, and then they may possibly do Service.—The following are proper :

Take Decoction of Sena, oz. xij. Thick emetic Wine, oz. xij. Electuarium Diacarthamum, [or of Bastard Saffron] oz. j. Tincture of Castor and of Amber, of each dr. iij. Mix for a Clyster; to be given every Day, or every other Day.

Or,

Take Sea-water, oz. xij. Tincture of Metals, oz. ij. Mix for a Clyster.

Or,

Take of the Herbs Feverfew, Savine, and Basil, of each m. j. Let them be boiled in q. f. of Sea-water, to oz. xij. when strained; to which add, Æthereal Spirits of Turpentine, and simple Spirits of Scurvygrafs, of each dr. iij. Mix for a Clyster.

The various Preparations of Mercury (such as the *Mercurius dulcis*, *Calomel*, Green Præcipitate, *Panacea mercurialis*, &c.) are used by some in these Cases: But if I may appeal to Experience as well as Reason, they are not equal to the Methods above-directed. Possibly, indeed, when the stagnant Humours are in some measure resolved, or their Constitution and Cohesion shaken; a Turbith Vomit now and then (for Revulsion's sake) may profit much: Or, a Dose of Glafs of Antimony, ordered in the manner following, may operate very successfully to the same Purpose:

Take Glafs of Antimony, gr. x. Strained Gum ammoniac, dr. j. make fifty Pills; of which four, five or six let be taken every fourth or fifth Night, (according to their Operation) either increasing or diminishing the Dose, as there shall be need.

Hitherto I have borrowed but very little from the vegetable Sphere; from whence, however, considerable

derable Succours may probably be drawn. Amongst those, the following (in my Opinion) merits the Preference:

Take live Wood-lice bruised, lb. ss. fresh Polypody-root, oz. iv. Horse-radish-root, Seed of Mustard, and Carthamus, [bastard Saffron] of each oz. ij. Roots of Smallage, Parsley and Madder, middle Bark of Elder and Ash, of each oz. j. Arum-root and Bark of Tamarisk, of each dr. v. Filings of Iron, oz. ij. Mix, and infuse cold for a Week in six Pints of Old-hock; of which, when strain'd, let four Ounces be drank for a Dose, thrice a Day.

The Use of hot, sulphureous Waters, both externally and internally, have sometimes been found of great Service in these Cases.

Great regard ought to be had to the Diet, under these Circumstances: Which should chiefly consist of Broths, with aperient, antiscorbutic Herbs, boil'd in them; such as the greater Celandine, Brooklime, Celeri, and Cresses. Roasted Pippins, and boil'd Turneps, are likewise very proper. But, for a more general and perfect Instruction in this Particular, I refer to Dr. *Arbutnot*, upon *Aliments*, Part II.

C H A P. XIX.

Of WORMS.

WORMS (if we speak with regard to the whole Species of them, in the utmost Extent of it) are, perhaps, the most numerous and multiform of any in the Creation. But if we confine our Inquiries to those only which infest human Bodies, they are divided and determin'd into four Sorts. This, at least, is the Opinion of *Riverius*, (a reputed Author) to whom I refer for a more particular History and Description of them. But if we may credit a more modern, and much

much later *French* Writer, (who shall be nameless with me) there may be Millions of Sorts of Worms, even in human Bodies: For the same ingenious and curious Author has (by an unwearied Application, and most exquisite Penetration) discover'd, that the constituent morbid Matter of all Diseases, is no other than so many different Sorts of Worms in the Blood, &c. which stimulate, irritate, gnaw and vellicate the animal Solids and Fluids. And these Things being granted, 'tis easy to conceive, that those their Effects on our Bodies will always be proportional to their respective Shapes and Sizes; as, some Worms may be provided with sharper Teeth than others; and as one of an Inch long will bite much harder than others that are a thousand, or perhaps a million times less. Since then the Point (with regard to the Variety and Number of their Shapes and Sizes in our Bodies) is morally undeterminable, it furnishes me with a very good Apology, for not endeavouring to enumerate and describe them. But besides, as they are all of the same Species, (only differing in Shape and Size) so, probably, the same Cure may do for all, only differently proportion'd. As for Example: If a Worm, of any given Magnitude, requires a certain Quantity of the *Vermifuge Specific*, to kill it; without doubt, one of half the suppos'd Bigness will be destroy'd with a less Dose.

But the great and main Question is, How these Worms are ingender'd and produc'd in animal Bodies? *viz.* Whether by a spontaneous and equivocal, or an univocal Generation? The former Opinion obtain'd, indeed, amongst Philosophers, for many Ages past: But those of the present Time have espous'd and maintain the latter. The former Opinion was founded upon mere Conjecture and Hypothesis; the latter upon Observation and Experience. But to exhibit one Example (of many) in Proof of this last Opinion: Take a Piece of Meat fresh kill'd, and
separate

separate it into two Parts, so that one may be equal to the other, in all respects. Suppose one Piece to be expos'd to Flies, and other Vermin, it will, in a little time, be fill'd with Maggots; and these will afterwards become (like their Parents, that produc'd them) Flies. We'll suppose the other Piece of Meat to have been carefully secur'd at the same time, against the Approach of Flies, and all other Vermin. This Piece of Meat may come to stink, indeed; but will never exhibit Maggots, though it should lie for Months together: Which is a very plausible and coercive Argument, in favour of univocal Generation.

Indeed, it is very difficult to comprehend, how the least, and most insignificant Insect in Nature, could be produc'd and animated, without a formal Act of Copulation. The mention'd Instance of two Pieces of Meat differently dispos'd, and consequently differently affected, proves that Flies were (at least) the efficient Cause of the Maggots. Who then can make the least Doubt, but that they deposited their Eggs in the Meat, judging it a proper and convenient Matrix?

Without doubt, the *Primordia*, or the original Seeds and *Stamina* of some Insects, are not only extremely minute, but very compact and solid likewise. And (this being granted) they may be bandy'd and toss'd about a long while, (after dimitted from the Parent) without being destroyed, or so much as squeez'd or hurt; till, at last, they meet with a convenient *Matrix*, and proper *Pabulum*, to call them to Birth. This, indeed, is evident in numerous Instances. For Example: Take a little dry Hay, and immerse it but twenty-four Hours, in clear, filtred Water; then examine the Water with a Microscope, and you'll find a Number of *Animalcula* skipping about in it, and resembling Worms. Whence it may reasonably be concluded, that the *Ova* of Worms pre-existed in the Hay; which (so soon as they met with a proper Fluid

Fluid to dilate, foment, and nourish them) manifested Life, &c.

The Maggots produc'd in some Sorts of Cheese, are surprising Instances to prove how long the Eggs of Insects may remain, and how many Changes and Scenes they may go through, without being destroyed or hurt. It is not improbable, but such *Ova*, or Eggs, of Insects, may alike exist in all Sorts of Cheese: Though, in the more hard and dry, (which are void of Fat) they never manifest Life; because they have neither room to swell and dilate, nor Moisture and Fat to foment and nourish them. But, in the fatter and softer Cheeses, (on the other hand) they are furnish'd and equipp'd in all these respects.

However, this Notion of univocal Generation is not altogether exempt from its Difficulties. For, if we may credit the Accounts of the famous itinerant Worm-doctors, and the Images painted on their Banners, there is an infinite Diversity of Worms, even in human Bodies: Some of which (as they cannot be likened to any that were ever seen, or heard of, before) they conclude to have been spontaneously bred in the Patient's Body; because, (say these Adepts) had they been produced from the Spawn or Eggs of others, then their Likeness must have pre-existed. Upon the whole; It may, I think, be very justly concluded, either that those Gentlemen have made very great Discoveries in that Sphere, or else that they have been endow'd with a very happy and fruitful Invention: For they represent some with many Heads, like a *Hydra*; some, again, with numberless Legs; and others, with *Harpies* Claws, &c. &c. But this is a Sort of Digression; for which I beg Pardon, and shall immediately recur to my Subject.

I lay it down, as undoubted Matter of Fact, that as all Worms in Human Bodies (of whatsoever Size, Shape, or Denomination) are of the same Genus or Species; so one and the same Antidote, differently
dosed

dosed and proportion'd, may be a Cure for them all. Thus much was necessary to be premised: For, otherwise, (it being supposed that Worms in animal Bodies are infinitely variable in their Species, as well as in their Shapes and Sizes) it might be expected I should direct as many different Methods of Cure, as there are distinct Shapes and Sizes of them; which, as they are (comparatively speaking) infinite, so these would be endless.

Riverius takes a great deal of Pains, and quotes numerous Opinions concerning the Causes (whether fundamental or efficient) of Worms in animal Bodies: But these are so prolix, mystical, and confus'd, that I forbear to recapitulate, and much more to recite them; therefore must refer the Over-curious to him upon that Head.

It would certainly be very well, indeed, if we could absolutely determine on, and ascertain the Causes of Worms, because then we should be the better instructed how to prevent them. But absolute Certainty, in that respect, will never be attain'd to, I fear. However, it cannot misbecome us to offer our Conjecture about it, how wide soever we may be of the Mark, when we have done. My Opinion, then, of the Matter, is (in one word) this: *viz.* That we daily take in more or less of the primeval Principles, Seeds, or Eggs of Worms, with our Food (though, doubtless, some Sorts of our Food abound more with them than others); and that (*cæteris paribus*) the suppos'd Seeds or Eggs are more susceptible of coming to Light and Life, according as the digestive and concoctive Faculties are stronger or weaker, and more or less perfect. Thus I judge and conclude, that where those Powers and Faculties in human Bodies are weak and imperfect, they are, in proportion, accessary to the Production of Worms; as (on the other hand) their Strength, Vigour, and Perfection, would be Obstacles to it. Hence it is, that Children, and
Adults,

Adults, of catechetical, pituitous Humours, are more subject to them than others.

As concerning the Signs or Symptoms of Worms, (whether external or internal) it is highly necessary to be well inform'd and instructed in that Point; that proper and timely Methods may be applied, to kill and exterminate them.

Riverius, in this Particular, has been very exact, accurate, and clear; whom therefore I shall cite, upon this Occasion: “ The Signs of Worms being
 “ present, (says he) and of their lurking in the Intestines, are wont to offer themselves variously: They
 “ do not all appear in all Subjects, but many of them
 “ in many. The more frequent and ordinary are,
 “ a peculiar offensive Smell of the Mouth, tending to
 “ Sourness (wherefore the good Women commonly
 “ term it, a *sour Breath*); and Stools, resembling
 “ Cow-dung, streaked with a grey Colour, so that
 “ they look like soft Clay. Other less frequent Signs
 “ are continual Fevers, which, from the Motions of
 “ the Worms, grow worse several times in a Day, attended with Anxiety, sometimes a cold Sweat,
 “ Faintness, Sickness at Stomach, Vomiting, and inexpressible Drought. The Pulse is unequal, the
 “ Cheeks look sometimes red, at others livid; the
 “ Eyes look bright, the Nose itches, the Teeth are
 “ set on edge, and sometimes chatter. There is a short
 “ husky Cough, the Spittle abounds in the Mouth
 “ more than usual. There is likewise sometimes an
 “ Heaviness of the Head, and Sleepiness; sometimes
 “ Light-headedness; at others, Convulsions, like the
 “ Falling-sickness: A Pain in the Belly commonly
 “ afflicts the Patient, like a Biting or Gnawing. Sometimes the Belly is inflated and distended, like an
 “ Hydropsy; sometimes they awake frightened in their
 “ Sleep; some tremble in their Sleep, and rise up,
 “ and then fall asleep again: Sometimes the whole
 “ Body falls away unaccountably; and sometimes they
 “ labour

“ labour under a ravenous Appetite, [*Fames Canina*],
“ an Erosion and Putrescence of the Gums, &c.”
That each of these Symptoms or Appearances do sometimes result from Worms, (as repos'd in different Subjects) is most certain: Therefore they ought to be well observ'd, and attended to with Caution; for Worms are very often not only the Effects and Companions of bad Habits of Body, but sometimes the Authors or Causes of them too.

Worms, of an almost incredible Size, (for aught I know, as large as any Earth-worms) have been bred, not only in the Bowels, but likewise in the Blood-vessels of People; of which I shall relate some Instances. I knew an elderly Gentlewoman, who (being indisposed) sent for a Surgeon to bleed her. Whilst the Blood was flowing from her Arm, it stopp'd on a sudden; and soon after, (to the great Surprise of the Spectators) a live Worm, of several Inches long, and in all respects resembling an Earth-worm, work'd itself out at the Orifice. I knew another, (a young Man) who (being lately arrived from the *Indies*, where he had been for several Years) was taken ill, though I forget in what manner. But, during his Illness, however, several large live Worms (resembling Earth-worms, in all respects) work'd themselves out at his Legs. Those Worms had a fine time of it, whilst the Man was in Health (for they solaced themselves with his pure Blood, without Controul or Restraint); but, alas! when the Man's Blood became distemper'd, they then abandon'd him.

The Intentions of Cure, here, may be express'd in a few Words; *viz.* they are either to kill or expel the Worms, or both. But to these may, very properly, be added another necessary View; this is, to correct or supplant the Cause that produc'd them: For otherwise, though a Person's Blood and Body is, at present, perfectly freed and clear'd of them; yet, should the efficient Cause still remain, he would very

probably fall under the same Predicament again, in a little time. Thus, at the same time that we are endeavouring to kill and exterminate the Enemies incumbent, or, at least, so soon as that End is compassed, we should take especial Care to repair and strengthen the injur'd Powers, Faculties and Functions of the Stomach and Guts; to confirm and invigorate the digestive Faculties, as well the last, which is perform'd in the Blood-veffels, as the first and second, which are executed in the *primæ Viæ*. To answer all these Views (as near as possible) conjunctively, (tho' we may have some peculiar and powerful Specifics against Worms) I apprehend, that well-concerted Cathartics, mix'd with Stomachics and Alteratives, may challenge a considerable Place. Wherefore I recommend as follows; *viz.*

Take antimonial Æthiops, dr. iij. Rhubarb, dr. ij. *Poterius's* Antihectic, Coralline, and Worm-feed, of each dr. j. Oil of Savin, gtt. xx. Extract of common Wormwood, dr. ij. choice Gum Galbanum and Sagapenum, of each scr. ij. Golden Spirits of Scurvygrafs, q. s. to beat well into a Mass for eighty Pills; five of which are to be taken for a Dose thrice a Day, drinking after them six Spoonfuls of the following Infusion:

Take Tops of Roman Wormwood, lesser Centaury, Succory, and dried Endive, of each oz. fs. Leaves of Calamint, Arum-root, Calamus Aromaticus, and *Winter's* Bark, of each dr. iij. Birthwort-root of both Sorts, of each dr. ij. Mix. To which pour Scordium-water, [Water-germander] boiling two Pints; let it stand a little way from the Fire, and let the Vessel be well-stopp'd, till it becomes cold: Then strain, and gently press it; and to every Pound add Chalybeat-wine, oz. ij. Ens Veneris, dr. fs. Mix.

Take Leaves of Sow-bread, Savin, Basil and Feverfew, of each m. j. Boil in q. s. of Water, to oz. xij. when strain'd; to which add emetic Wine, thick, oz. j fs. Sheeps-gall, dr. iv. Make a Glyster. To be given in the Evening; and to be repeated as often as Need shall require.

Take Rhenish Tartar, dr. fs. Calomel, and native Cinnabar, of each gr. xij. Venice-treacle, q. s. to make a Bolus. To be taken at Bed-time, twice a Week; and the next Morning the following Potion:

Take

Take Decoction of Sena, oz. iij. with Mecoachan-root, and Hermodactyls, of each dr. fs. boil'd in it; to which add Electuarius Diacarthamum, dr. ij. Tinctura sacra, oz. fs. Mix.

Sometimes (as *Riverius* justly observes) Worms are accompanied with a Fever, or else produce one; which is vulgarly (though not improperly) call'd, a *Worm-fever*. And in such Case, a different Course will be required: *Ex. gr.*

Take Æthiops Mineral, dr. fs. *Poterius's* Antihectic, and Hartshorn philosophically prepar'd, of each gr. x. Coralline and Worm-seed, of each gr. v. Lenitive Electuary, dr. j. Syrup of Succory with Rhubarb, q. f. to make a Bolus. To be taken every sixth Hour, drinking after it oz. iv. of the following Apozem:

Take Leaves of Scordium and Scabious, of each m. j. Roots of Scorzonera, Grass, and Asparagus, of each oz. j. Shavings of Ivory, dr. vj. Coriander-seed, dr. iij. Let them be boil'd in q. f. of Water, to lb. ij. when strain'd; to which add Syrup of Succory with Rhubarb, oz. ij. Sal Polychrest, dr. ij. Mix.

Take white Sugar-candy finely powder'd, dr. iij. Sperma Ceti, dr. ij. Mix; to which add, by little and little, and by turns, cold-drawn Linseed oil, and Syrup of the Five opening Roots, of each oz. iij. Make a Linctus, of which take a Spoonful three or four times a Day. Let the afore-written Glyster be repeated every other Day; or oftener, if Need.

By this Method the Fever will, in all Probability, be soon taken off. Nor will its Cause (the Worms) fail of being better'd by it. And so soon as the Fever is reduced, it will be time to proceed with the former Method.

I could easily direct various other Kinds and Forms of Medicines, which would seem proper and good for destroying Worms: But as the above appear equal to any thing I can think of, it would be needless to multiply Prescriptions. And furthermore, I dare promise, that the above Medicines will be found effectual. The Linctus, *ex Ol. Lini*, &c. is not proposed as an

Antidote for the Worms, but only to lessen the Perception of their *Stimulus* and Irritation; by means of which they excite a Fever.

Plaisters and Liniments are sometimes applied to the Belly, (for Worms) with Advantage. Amongst which, I prefer the following:

Take Myrrh, Galbanum, Sagapenum, and Hepatic Aloes, of each oz. j. Let them be beat together into a gross Powder; dissolve in Vinegar, strain and press; then exhale it to a moderate Consistence, and let it be spread upon thin Leather, and applied to the Region of the Belly.

Another:

Take the magisterial Stomach-plaister, oz. j. Camphire, dr. j. dissolved in Oil of bitter Almonds; chymical Oil of Wormwood and of Savin, of each dr. ss. Mix for a Plaister; to be applied to the Region of the Belly.

Or,

Take the green Herbs of Bears-breech and Savin, of each oz. iij. Bullocks Gall, oz. x. Let them be boil'd together, to the Consumption of the aqueous Part; strain, and strongly press; then add anew of the green Herbs; let them be boil'd as before; which strain and press; and with the express'd Liquor anoint very well the Region of the Belly, every Night and Morning.

Some Persons have ventur'd upon using mercurial Ointments to the Belly for Worms: But that Practice I cannot encourage. Others recommend crude Mercury, boil'd in Water, or in some proper Decoction, as a mighty Specific for these Vermin: But that I have known to fail. However, Quicksilver, given in Substance, (no matter in what Form or Vehicle, so it has but some one) will always be found of Use. And we find Physicians, for several Ages past, (notwithstanding how cautious some are about using it, at this Day) have prescribed it for the Disorder in question, both with Safety and Advantage. *Riverius* mentions one Form of giving it, (which he takes from *Johannes Baptista Zappata*) that I like very well. It is this:

Take

Take Quicksilver, from scr. j. to dr. j. Benjamin, scr. ss. Aqua Vitæ rectified, gtt. iv. or v. Mix very well in a Glass-mortar, and with q. s. of Conserve of Roses make a Bolus for one Dose.

But, nevertheless, I prefer the *Æthiops Antimonial*, or *Æthiops Mineral*, to any or all other Ways of giving it; especially in this Case. Besides these, the Waters of hot, sulphureous Springs, drank in these Cases, are found very successful.

When, by the Use of any one or other of the above Methods, the Worms are perfectly destroy'd and extirpated; it remains, then, to repair the Constitution, wheresoever she appears injur'd or defective, and so to enter a Caveat against their getting footing afresh. And, to this End,

Take Jesuits-bark in very fine Powder, oz. ij. *Mynsicht's* Tincture of Steel, dr. vj. Let them be rubb'd very well together, to a blackish Powder: To which add Ginger candy'd, oz. ij. Syrup of the same, q. s. to make a soft Electuary, whose Dose is dr. ij. thrice a Day; drinking after, six Spoonfuls of the following Infusion:

Take Tops of Roman Wormwood, oz. j. Chamomile-flowers, and Tops of the lesser Centaury, of each oz. ss. Species of Diambre, of Galangal, and lesser Cardamum-seeds, of each dr. ij. Rhubarb, dr. ij. Infuse warm two Days in White-wine and Carduus-water, of each lb. j ss. Strain, press gently, and give it.

During this last Process, *Spaw* Water, Riding, and cold Bathing, are to be advised.

The Seeds of Nettles, Cabbage, Cummin and Mint, are recommended by *Celsus*, as a sovereign Remedy for Worms. I confess, I never experienced them (finding my End always answer'd by other Things); but other People are free to do it, if they please.

C H A P. XX.

Of the JAUNDICE.

BESIDES the outward and visible Signs of this Distemper, which notify it to every common Spectator, as well as to the most judicious and discerning Physician, there are yet many other Symptoms, which plainly specify its internal Nature and Constitution.

This Disease, however, is distinguished and divided into two Kinds or Colours; *viz.* into the yellow, and the black Jaundice. *Riverius* says, the latter Sort depends not upon the Liver, but on the Melt or Spleen. Now, for my Part, I judge this his Definition to be rather chimerical than true. It is most certain, that the Gall is not only subject to Obstruction, but to Perversion and Depravation likewise. And supposing (in a Case of the Jaundice) the latter to exist, as well as the former; the Tincture both of the Skin and Urine may recede from the Yellow, and incline to the Livid or Black. But however, the black Jaundice is a very rare Circumstance; and when it does happen, is commonly thought to be incurable: Therefore I shall particularly confine my Reflections to the *Yellow*.

That the *Ductus communis biliaris* is choak'd and stopp'd up in this Disease, is universally known: And hence the Passage of the *Bile*, from the *Cystis biliaria* to the *Duodenum*, is totally hinder'd or supplanted. The Usefulness and Importance of the *Bile* (as kept in its regular Course, and inviolate, both in its Quality and Quantity) is egregiously specified, by the Inconveniences and ill Consequences which result from its Obstruction or Perversion. And, first, as to its Obstruction: The *Bile*, when denied its natural and regular

regular Passage into the *Duodenum*, necessarily recoils upon the Blood; whence proceed the yellow Tincture in the Skin, the yellow turbid Urine, and that *Pruritus* or Itching in the Skin: From thence, likewise, proceeds that disagreeable bitter Relish in the Palate and Throat. But those Effects which flow from a Surcharge of Bile in the Blood, are by no means commensurate with those which result from the Want of it in the alimentary Duct. These are, Faintness at Stomach, Inappetency, Sickiness, Reachings, Qualms, *Ructus's*, Indigestion, colicky Pains, and white clayish Stools. In a word, there is scarce a Symptom or Circumstance, incident to the *primæ Viæ*, but what this Disease may, and at some time or other does, produce.

The Stools, under this Distemper, are (as above-observed) white and clayish. The Reason of the first *Phænomenon*, any-body may account for: But, to explain the latter, demands further Inquiry, and deeper Penetration. And, first, when our Aliments have been sufficiently digested in the Stomach, and are from thence thrust off into the *Duodenum*, it is then and there the peculiar Prerogative and Office of the *Bile* to mix with, attenuate, dissolve and comminute them: To dissolve, (I say) break and destroy their Viscidity, Tenacity, and Cohesion. And, lastly, to the *Bile* (thus mixing with them) is owing the yellow Colour of the Excrements of a Person in Health.

Now in the Case of a *Jaundice*, when the Aliments are as well digested in the Stomach as the Disease will allow of, and are thence protruded into the *Duodenum*, in their chylous State and Nature, their more fluid, thin, and subtil Part, may (by the peristaltic Motion of the Guts, and the Compression of the abdominal Muscles) be forc'd through the *Lacteals*, and so make their way into the Blood, as much, or nearly so, as if assisted and meliorated by the *Bile*: But then the *Sordes*, or *Stercus*, (which is afterwards discharg'd by

the *Anus*) must necessarily be white, for want of the *Bile* to tinge it yellow; and its clayish, tenacious Substance and Nature, will yet subsist, for want of the said *Bile*; whose proper Office it is (as above-mentioned) to attenuate, dissolve, and destroy it. Here we quit the Intestines, pursue the *Chyle* into the Blood, and there bring it under further Examination.

The *Chyle* (then) of *Icteric*s, though it may be as copiously dispensed to the Blood (in proportion to the Quantity of Aliments taken) as that of a healthy Person; yet it cannot be so well elaborated and prepared, nor so easily assimilated by the Blood, as if it had been previously mixed with, and meliorated by, the *Bile* in the *Duodenum*. From hence, doubtless, (*viz.* from a depraved *Chyle*, and such as is unfit for Nutrition) proceed Languors or Faintness, Heaviness, Listlessness, Dulness, Inactivity, &c. But thus much of the Symptoms; which are so well and commonly known, that I had not taken the Trouble to enumerate them, only in order to define and explain them.

The antecedent or most remote Cause of this Disease, is whatsoever may or does bring on a gross or viscous Habit of Blood. The mediate Cause is whatsoever determines and concentrates the supposed gross or viscous Humours in the biliary Pipe; and the *Causa proxima*, or immediate Cause, is (as above-said) their choaking and stopping it up. Thus the Nature of the Disease is fully express'd and contain'd in the immediate Cause, as its Essence is in the mediate.

As to the curative Part of this Malady, it is summ'd up and comprehended in one Indication; that is, to open the biliary Duct, by removing the stagnant, obstructing Matter. It's necessary to premise, indeed, that this Disease may be produced from ill Humours, of divers Species or Kinds; and, consequently, the Methods of Cure should vary, and be adapted accordingly.

cordingly. *Ex. gr.* First, The Disease in question (or the Obstruction which immediately subtends it) may be caused by an Assemblage of gross, grumous Particles of Matter. Or, secondly, by a Concentration of tough, viscous Humours. Or, thirdly, by those of a petrescent or lapidescent Nature; aggregating, and growing gradually together in the biliary Pipe, till such a Substance is formed, as intirely to stop it up.

I lay it down, as undoubted Truth, and Matter of Fact, that the Obstruction in the biliary Pipe cannot be formed of a sudden (whatever Species of Humours it may consist of); but that it is formed gradually, and by the following Mechanism; *viz.*

I suppose then, first, that fundry Particles of Matter, (suppose six, eight, or ten, more or less) which were homogeneous or similar, meeting together in the common Course of Circulation with the Blood, and striking each other at proper Angles, may inosculate, cohere and unite together, and dispose themselves at Rest in some Part, Place or Chanel of the Body, (in the biliary Pipe, for Example) to which they stick or adhere. Secondly, When a compound Substance (though, as yet, small) is formed by the Union of various similar or homogeneous Particles, they will necessarily (in Obedience to the same Law of Attraction that brought and combin'd them together) incline and attract to them such other similar or homogeneous Particles, as pass by or approach near them in the Course of Circulation. The pre-supposed Substance thus gradually increasing, its attractile Power and Force will be augmented in Proportion: So that when the supposed compound Substance is already advanced to any considerable Magnitude, its After-growth will be greatly precipitated. And thus the biliary Duct (whose Stoppage was not more than half formed, perhaps, in six Months after its first Commencement) may become intirely closed up in a few Weeks,

Weeks, or even a few Days, after its obstructing Cause was advanc'd to its Semi-magnitude.

This way of defining the Formation of a *Faundice* may, perhaps, offend some of those Gentlemen who oppose the Notion and Doctrine of Attraction in Bodies: But I am in no Concern about that; as it is a Doctrine I firmly believe, and am as well convinced concerning the Truth of it, as I can be of any thing that is not palpable to my outward Senses. And moreover, I may, perhaps, be casually led to bring Arguments, in treating on some subsequent Diseases, which will be evident Proofs of its Reality.

If it should appear to the attentive and skilful Physician, at any time, that the Disease in question arises from gross, grumous Humours, obstructing the biliary Pipe; in such Case I prescribe the following: *viz.*

Take antimonial *Æthiops*, dr. iv. Rhubarb and Gum Guaiacum, of each dr. ij. Euphorbium, gr. xij. Venice-soap, dr. vj. Let them be beat into a Mass for eighty Pills; five of which are to be taken thrice a Day.

Take live Wood-lice bruised, oz. iv. Mustard-seed well-bruised, oz. ij. Horseradish-root, oz. j. Let them be beat together, and add by little and little old Rhenish Wine, lb. ij. Strain, and strongly press; and in the press'd Liquor dissolve *Ens Veneris*, dr. j. and let three Ounces be taken after every Dose of the fore-written Pills.

Take emetic Wine, dr. x. for one Dose; to be taken about six o'Clock in the Evening, every third or fourth Day, drinking plentifully between the Vomittings.

But if a *Faundice* is produced from tough, viscid Humours, then the following are to be preferr'd:

Take Filings of Iron in subtil Powder, dr. vj. choice Rhubarb, dr. iij. Powder of Arum-root, dr. ij. Vitriol of Steel, scr. ij. Venice-soap, oz. j. Let them be beat into a Mass for 120 Pills; five of which are to be taken every sixth Hour, drinking after, oz. iij. of the following Infusion:

Take Madder-root, oz. ij. of Turmeric and Arum, of each dr. iij. of Turpeth, Mecoachan, and Hermodactyl root, of each dr. ij.
Mix,

Mix, and infuse warm for twelve Hours in three Pints of Old-hock; then strain and press it: To which add press'd Juice of Wood-lice, oz. iv. Syrup of the five opening Roots, oz. ii. Mix.

In this Case, likewise, give the *Emetic* described above, every third or fourth Day.

There is yet another Species of Humours, which stands charged with being sometimes the Foundation of this Disease: These are the petrescent or lapidescent. Indeed, it is affirm'd and maintain'd by some reputed Authors, as well as by others in present Practice, that a Jaundice is sometimes constituted of these Sort of Materials. And as a further Proof of it, we are assured, that very solid, compact Stones, have been sometimes found (upon the Dissection of Icteric Bodies) in the Gall-bladder; and, at other times, in the *Meatus biliaris*.

That these Things may happen, is by no means to be denied, or even to be doubted: For, though the Reins, Ureters, and urinary Bladder, are the common Seats of those extraneous Productions, yet they may possibly be formed in any other Part of the human Body whatever; and, consequently, either in the *Cystis*, or the *Ductus biliaris*.

When this plainly appears, or is judg'd to be the State of the Case, the Physician will have great reason to suspect that the Disease will withstand a long and vigorous Siege; and that the Victory will be not only very difficult, but very doubtful likewise. However, (to suppose the best) it will certainly be found much more difficult to dissolve the Cement, and destroy the Cohesion of such concrete Substances, than it can be to attenuate and resolve the Viscous and Glutinous, or to break, divide, and comminute, the Gross and Grumous. But nevertheless, as the Disease in question, founded even upon this Basis, does not absolutely preclude Hope of Relief; so I will dictate such Medicines

dicines and Methods, as, in my Opinion, bid fairest to answer the desired End.

In this Case the curative Indication is twofold, *viz.* either to dissolve, or otherwise destroy the Cement of the *Calculi* (in consequence of which, they will moulder and crumble to pieces); or else to mollify and relax the biliary Duct to such degree, that, upon applying strong, irritating Medicines, afterwards, the supposed *Calculi* may be protruded, expelled, or ejected into the *Duodenum*.

As to the first Part of the Indication, we cannot (in my humble Opinion) flatter ourselves with any great Hopes of ever answering it; let Chymists, and other chimerical Persons, talk what they will of their boasted *Menstruums*, and other Dissolvents. But as to the latter, it may, in great Probability, be effectuated, by the Application of well-concerted Medicines. However, before I proceed to consider this, I shall take a short Retrospect of the first Part of the Indication. If Stones, or *Calculi*, (especially such as have acquired any Degree of Density and Solidity) are any ways dissolvable or divisible in the Human Body, I apprehend it will be best effectuated by some one or other of the following Principles and Forms; which depend either upon a saline, a sulphureous, or a mercurial Basis. And first, as to the Saline:

Take *Glauber's* Salt, oz. iv. vitriolated Tartar, dr. iij. Oil of Juniper, gtt. xxx. Make a Powder, to be divided into seven Papers; one of which let be taken every Morning, in a Draught of Whey.

Take Sal Polychrest, dr. iv. calcin'd Egg-shells, dr. iij. Ens Veneris, dr. j. Make a Powder, to be divided into twelve Papers; one of which take every Day, at four o'Clock in the Afternoon, and at Night going to Bed.

Another Method, consisting of sulphureous Principles.

Take native Sulphur, oz. j. Gas of Sulphur, dr. ij. Rob of Juniper, oz. iv. Oil of Juniper-berries, dr. j. Mix for an Electuary;
of

of which take the Quantity of a Chesnut thrice a Day, drinking after, oz. vj. of the following Infusion :

Take Roots of Garlick and Onions, of each oz. iv. Parsley-seed, oz. ij. Seeds of Smallage and Carrot, of each dr. v. Filings of Iron, oz. ij. Let the Roots be cut, and the Seeds bruised small, and then mix'd and infus'd in lb. iv. of old Rhenish Wine. Let it be strain'd at the time of using.

A third Method, consisting of mercurial Principles.

Take Quicksilver strain'd, or rather resuscitated from Cinnabar, lb. j. Syrup of Marshmallows of a thick Consistence, oz. iv. Let them be mix'd in a marble Mortar, until the Quicksilver is divided into minute Particles; then add Rob of Juniper, lb. j. Gum Guaiacum powder'd, oz. ij. Let them be all rubb'd together anew, and be most perfectly mix'd; of which let be taken dr. ij. or iij. for a Dose, every Night and Morning, upon those Days when the Patient doth not take a Purge.

Take Diagrydium, gr. xij. Gamboge and Resin of Jalap, of each gr. v. Salt of Tartar, gr. iv. Oil of Juniper, gtt. v. Syrup of Buckthorn, q. s. to make five Pills: To be taken every fourth or fifth Day.

These divers Methods may be respectively practised one after another, except the first or second should answer the End, and so render any further Advances unnecessary. But each of these ought to be allow'd a fair Trial; that is, they should each of them be continued for the Space of a Month or six Weeks, at least: For it is easy to discern, that the Extirpation of so stubborn a Root must require Time, as well as the utmost Force and Extent of human Invention. And if a Cure is to be brought about by pursuing this Part of the Indication, I firmly believe it will be achiev'd by one or other of the above.

We come now to discuss the latter Part of the Indication. To answer which,

Take Venice-soap, and Sperma Ceti, of each oz. j. white Sugar-candy powder'd, dr. xij. Let them be beat all together into a smooth Pulp; adding by little and little, and by turns, Syrup of Marshmallows, and cold-drawn Linseed-oil, of each oz. iv. and make a Linctus; of which take one Spoonful every fourth Hour, drinking after, a Glass of the following Decoction:

Take

Take the Roots of Marshmallow fresh, and Asparagus, of each oz. ij. Pearl-sugar, oz. iij. Let them be boil'd in q. s. of Elder-flower-water to three Pints, when strain'd.

Take Glass of Antimony in subtil Powder, and Euphorbium, of each gr. x. Extract of black Hellebore, dr. j. Make thirty Pills, to be well-gilt; three of which let be taken every fourth Night going to Bed, either increasing or diminishing the Dose, according to its Operation.

This last Process ought to be continued for a long time, except a speedy Cure should render it unnecessary. The *Eclegma* and Decoction will relax powerfully, and consequently the biliary Duct will be render'd more distendible. And as the Pills (which are directed to be taken every fourth Night) will both irritate and operate violently, so probably the supposed stony Concretions may be dislodged and ejected into the *Duodenum*.

I know some great Men of the Faculty, who have not hesitated to pronounce this the Cause of a *Jaundice*, as often as the Remedies they prescribed prov'd insufficient to work a Cure. But I conceive, however, that this Cause is really pleaded or assign'd rather as an Apology for their Want of Success, than as their sincere Opinion.

For my own Part, I declare I never yet met with an Icteric Patient (in my own Practice) which gave me reason to suspect that the Disease was founded upon this Basis. On the contrary, I have generally (and even to one single Exception, amongst many Patients I have had in this Disease) been very happy, and pretty speedy, in the Cure of them; which I have usually effected by one or other of the Methods above laid down; only adding or diminishing, and otherwise varying, as the particular Case and Constitution might require.

C H A P. XXI.

Of the D R O P S Y.

TH E Opinions of many celebrated Writers (as well ancient as modern) concerning the Causes, the original Seat or Source, and other Circumstances of this Disease, are very various, perplexed and confused, and (to me at least) very unsatisfactory: Therefore I shall scarce consult with them, or appeal to them; but proceed to deliver my own Sentiments upon the Matter.

The Dropsy is first divided into three distinct Kinds; *viz.* the *Ascites*, the *Tympanites*, and the *Anasarca*: And it is again subdivided into several others, according to the particular Parts or Regions of the Body which it possesses; as for Example, the *Hydrocephalus*, or Dropsy of the Head, the Breast, the *Uterus*, &c.

The Dropsy, however, (under all these various Distinctions and Appellations) proceeds, generally speaking, from one and the same Cause, (the *Tympanites* excepted) only differently disposed and limited in various Subjects.

The antecedent or most remote Causes may be various; as for Example, Intemperance in drinking of ardent and spirituous Liquors, frequent catching of Cold, or an habitual Constipation of the excretory Pores of the Skin; a Privation of the digestive and concoctive Faculties; or (in a Word) whatsoever may or does render the Blood phlegmatic and slimy, viscous and fizy, and (more especially) poor, vapid, and spiritless.

The mediate Cause, then, of the Disease in question consists in all, or any one, or more of the supposed ill Habits of Blood; but the immediate Cause,
or

or *Causa proxima*, in a Rupture, or immoderate Distention of the Lymphatics.

A Person's Blood being under the ill Conditions and Circumstances above-mentioned, though (indeed) it may possibly terminate in some other Malady, yet will it more necessarily tend to the Production of a Dropsy, for the following Reasons: And, first, the Blood (as above-said) being not only phlegmatic, slimy, fizy, &c. but vapid, poor, and spiritless likewise, can secrete but a small Quantity of animal Spirits: 2^{dly}, In consequence of this Dearth or Defect of animal Spirits, the Lymphatics, and all the other Glands and Vessels, will (in proportion) loose of their natural Spring and Elasticity. 3^{dly}, The Blood (at the same time) moving but heavily and lazily thro' the Vessels, will overbear upon the Lymphatics, &c. will force itself (or at least its serous, watery Part) into their Substances; and so, finally overstretch or break them: And thus is laid the Basis or Rudiments of a Dropsy.

I cannot omit, however, to observe (*en passant*) what *Hippocrates* says upon this Subject. He supposes, (*Aphorism 55. Sect. 7.*) That the Liver may be filled with Water; which Water may first disembogue itself into the Cawl, or *Omentum*, and from thence again be discharged into the Cavity of the Belly, by the Ramifications of the *Vena Porta*, by the epiploic and gastrepiploic Vessels or Veins. These latter are derived from the Spleen; by the Means and Mediation of which Bowel, Water is conveyed to them from the Stomach, and is by them vented into the Belly.

The *Vesiculæ Hydatides* (which are an immoderate Distention of the capillary Lymphatics, on the Superficies of the Liver) are said to produce the Dropsy, sometimes; for, these breaking, or bursting, and disemboguing their watry Contents into the Cavity of the Belly, produces that Disease. Moreover, the like Distemperatures, (besides many others) whether situated

situated in the Spleen, Pancreas, Cawl, Mesentery, Stomach, Intestines, Reins, or *Uterus*, may produce the same Effect.

An *Ascites*, however, (generally speaking) makes its first Appearance in the Legs, about the Ancles: From thence (if not timely remedied or prevented) it ascends gradually to the Thighs. The next Region it seizes, is the *Abdomen*; from whence it advances upon the *Thorax*: And when it is got so far, the Tragedy is then near at an End, except uncommon Art and Care are exercised to divert it.

The Reason why this Disease shews itself at first in the Ancles and Smalls of the Legs, is very obvious and plain: But to make this appear, it must be considered, that the Blood is determined on the depending Parts of the Body (particularly to the Feet and Legs) in a double Sense: *Ex. gr.* First, by the projectile Force which it receives (in common with all other Parts of the Body) from the Heart: And *2dly*, by the universal Property of Gravitation, or its Propensity to tend to the common Centre; but, in proportion as the Blood descends into the Legs and Feet with greater Freedom and Velocity, (as the Spring and Elasticity of the arterial Vessels are weakened, and consequently make the less Resistance) so it ascends again with greater Difficulty. And thus, betwixt these two Extremes, *viz.* the Blood's too easy Descent, and too difficult Ascent, the Feet and Legs are overcharged; the arterial Vessels and Fibres are immoderately stretched, distended and weakened, and the lymphatic Glands yield to the intruding *Serum*.

Hydropical Swellings in the Legs are easily known and distinguish'd from any other; because they are of a very pulpy, doughy Nature, insomuch that an Impression made with a Finger over-night, scarcely disappears before the next Morning.

This pitting of the Flesh, in Hydropics, sufficiently testifies concerning the Essence of the Disease: *viz.* that the Spring or Elasticity of the Solids is lost; or greatly impaired, and that the Fluids are fizy, vapid, and spiritless: And from hence, again, the Indications of Cure are very plainly to be inferred. These are, first, To evacuate or discharge the redundant, stagnant or extravasated Lymph, by Stool, or Urine; or, indeed, both ways: *2dly*, To resolve and destroy the phlegmy, fizy Habit of the Blood: *3dly*, To warm, comfort, enrich, inspirit, and invigorate the Fluids: *4thly*, To promote a copious Separation of animal Spirits: And, *5thly*, To restore the Spring or Elasticity of the Solids, especially of the smaller Arteries, and lymphatic Glands. To answer the first Intention;

Take Diagrydium and Gamboge, of each scr. iv. Elaterium and Salt of Tartar, of each scr. j. Oil of Juniper, gtt. xxx. Elixir Proprietatis, q. s. to make a Mass for xxxv Pills; of which take five (more or less, according to their Operation) every other or every third Morning.

Take Juice of both Scurvy-grasses, of Water-creffes, Brook-lime, and of Seville Oranges, of each oz. x. Expressed Juice of Woodlice, oz. v. Mix and filtre; and to every Pound add dulcified Spirit of Nitre, dr. iij. Tincture of Amber, dr. j ss. Mix. The Dose oz. iij. thrice a Day, upon those Days when no Purge is taken.

With regard to the second Intention,

Take Peruvian Bark in fine Powder, dr. xij. Rust of Iron, dr. iv. Species of Diambre, dr. ij. Species of Three-peppers, dr. j. Candied Ginger-root, oz. ij. Syrup of Steel, q. s. to make a soft Electuary; of which take the Quantity of a Chesnut, every fixth Hour, or thrice a Day, when no Purge hath been taken; drinking after, a Draught of the afore-prescribed Juices.

It will be adviseable to put this Electuary in Practice, as soon as the Patient has purged three or four times;

times; and to continue constantly in the Use of it, with the antiscorbutic Juices, on the Days betwixt Purging; by which means two Views or Intentions will be answered together: And to answer the third Intention, (laid down) I recommend as follows; *viz.*

Take Tops of Roman Wormwood, oz. j. of white Horehound, of Centaury, and Roman Chamomile-flowers, of each dr. iij. Species of Diambre without Perfumes, Arum-root and *Winter's* Bark, of each dr. iv. Mix, and pour to them lb. ij. fs. of boiling Water: Let it stand upon warm Ashes, in a Vessel well closed, for three Hours; then strain, and gently press, and to every Pound of the Clear, add *Mynsicht's* Tincture of Steel, dr. j fs. Viper-wine, oz. iij. Mix and filtre. Dose oz. iv. to be taken twice a Day, at Physical Hours; and drink at the same time Spaw Water, for common Drink.

Take Powder of Virginian Snake-root, gr. xv. Volatile Salt of Vipers, gr. x. Electuarius Diasatyrion, dr. fs. Syrup of Chermes, q. s. to make a Bolus, to be taken every Night, going to Rest.

When this Sort of Dropsy is so far advanced as to deposit a great Quantity of Water in the common Cavity of the Abdomen, recourse must then be had to the Operation of the Paracentesis; as nothing can avail without it: And when the Waters have been totally drawn off and discharged by that means, the Electuary of Jesuits Bark, &c. with the above Infusion of Roman Wormwood, &c. will be very seasonable and proper, to restore the weakened Solids, to warm, inspirit, and invigorate the Fluids; and so to prevent a Relapse, which otherwise would very probably happen.

Sometimes the *Viscera* (or at least some one or other of them) become ulcerated, from the Putrefaction of the stagnant *Serum*: And whenever this happens, the Consequence is always fatal. But when this is the State of the Case, we have no certain outward Marks or Characteristics, to express or betoken it, except only such as may be gathered from the

Urine; which however are, generally speaking, doubtful and precarious.

I forbear to mention the whole Catalogue of Symptoms, which are peculiar or incidental to this Disease; with its Diagnostics, Prognostics, &c. those Things being foreign to my Design: Therefore, to be duly instructed in those Particulars, I refer my Reader to such Authors as treat Physic rather in an historical than a rational and philosophical Light.

The *Tympanites* (another Species of Dropsy) consists in an immoderate Distention of the *Abdomen* only; which Distention is totally, or at least chiefly, produced by Wind: But whence this Wind is generated, and how thus imprisoned and confined in the *Abdomen*, that is the great Question.

It will appear (I believe) upon a nice Inquiry, that Wind is, or may be, generated and produced from the same original and general Causes which are assigned as the Foundation of an *Ascites*: But then those Causes must be supposed to be differently determined; or else to act in a different Sphere, that is, in a different Constitution. Now, that the same specific Cause, as it may be disposed in different Constitutions, or as it may be variously determined in the same Constitution, may produce different Effects, (and *vice versa*) has already been supposed, and almost proved.

Let us suppose then, that some one or more of those original or first Causes, assigned for the Production of an *Ascites*, (existing some Time) to have brought on a phlegmatic, slimy, vapid, spiritless Habit of Blood; 'tis plain, such a Habit of Blood may as necessarily tend to the Production of Wind or Flatulencies, as to any other given Thing whatever: Witness the many Colicks and other windy Disorders of the Stomach and Bowels; all which proceed from some one or more of the mentioned Causes. Suppose we again, that the Wind so generated (in-
stead

stead of being situated in the Stomach and Guts, (whence it would soon find a Passage out) should be formed and produced in the Blood vessels and Glands of the Mesentery; or in any other confined Cavity of the *Abdomen*: 'Tis plain, it must necessarily (in that Case) produce a *Tympanites*.

A Habit of Blood, retaining to the phlegmatic, slimy Kind, always implies crude, indigested, unconcocted Humours; and such Humours are the most common Parents of Wind. From the Collision and Attrition of such Humours (which may as well happen in the Blood-vessels, as in the larger Canals of the Body) arise preternatural Ferments, indigested Vapours, Wind, and what not? When Wind is thus formed and rarefied in the Blood-vessels of the Mesentery, or other *Viscera*, it will necessarily force itself into the lymphatic Glands; or force its Way through them into the Cavity of the *Abdomen*. From all which it appears, that the Habit of Blood, productive of this Kind of Dropsy, is just as depraved, and perhaps in the same manner, as that which gives Birth to an *Ascites*.

The Indications of Cure, in this Case, are, first, To discharge or expel the incumbent Wind: 2^{dly}, To warm, comfort, strengthen, and invigorate, both the Solids and the Fluids: 3^{dly}, To restore and confirm the digestive and concoctive Faculties.

If the Wind is confined in the common Cavity of the *Abdomen*, it will (in such Case) be very difficult to discharge it by any other Means than an Aperture, as in the Operation of the *Paracentesis*.

I have experienced the great Difficulty of discharging Wind, thus disposed, by means of any Medicine whatsoever; and therefore I always advise, that an Aperture be made without Delay. Indeed, if Wind, as it is originally produced from solid Bodies, or Particles of Matter, could be resolved or condensed into the same again, it would then be a different Thing:

But I much doubt if ever that was so much as thought of; and much more, if ever it was performed.

Neither Purges nor Diuretics have (as such) any Place here. The following will, at least, be of Use, to mend the Condition of the Solids and Fluids, and perhaps may be found equal almost to any thing, for dissipating or expelling the Wind:

Take Rust of Iron, in subtle Powder, dr. vj. Species of Diambre, and *Bates's* Pulvis pepticus, of each dr. iij. Rhubarb, dr. ij. Seeds of the less Cardamums and Cubebs, of each dr. j. Nutmeg powdered, oz. j. and candied Nutmeg, oz. ij. Syrup of Mint, q. s. to make an Electuary; of which take the Quantity of a Chesnut, twice a Day, drinking after it, oz. v. of the following Infusion:

Take Juniper-berries, oz. iv. Caraway and Coriander-seeds, of each oz. ij. Cumin-seeds, dr. v. Dry'd Angelica-root, oz. j. Zedoary and Ginger, of each dr. iv. Chamomile-flowers, dr. v. Beat all together into a gross Powder; to which pour old Rhenish Wine, lb. iv. and infuse with a gentle Heat two Days: Then let it be strained and pressed; and to every Pound add *Mynsicht's* Tincture of Steel, scr. iv. Mix and filtre for Use.

Take Spanish Angelica-root powdered, and Nutmeg, of each dr. fs. Volatile Salt of Vipers, gr. x. Ens Veneris, gr. vij. Make a Powder, to be taken every Night, going to Bed, in a Draught of White-wine.

The *Anasarca*, or last general Kind, affects or spreads itself over the whole Body.

This Sort of Dropsy depends immediately upon a leucophlegmatic Habit of Blood; tho' it claims much the same antecedent Causes, as the others.

The *Anasarca* (especially if recent) admits of a more easy and certain Cure, than either of the former. The Indications of Cure are the same as in the *Ascites*, and consequently the same Remedies, or nearly so, will have place here.

Take Gamboge and Diagrydium, of each dr. j fs. Elaterium, gr. xxiv. Euphorbium, gr. viij. Oil of Savin, gtt. xv. Mix, and with a few Drops of Elixir Proprietatis beat into a stiff Mass
for

for forty Pills, to be well gilt, and take five every second or third Morning; increasing or diminishing the Dose according to the Strength of their Operation.

Take Rust of Iron in subtle Powder, and Powder of Vipers, of each dr. vj. Arum-root and Rhubarb, of each dr. ij. Ens Veneris, scr. ij. Candied Ginger-root, and Conserve of Roman Wormwood, of each oz. j ss. Syrup of Ginger, q. s. to make an Electuary; of which take the Quantity of a Chesnut, thrice a Day, drinking after, oz. iv. of the following Mixture:

Take Juice of both Kinds of Scurvy-grasses; of Water-creffes, Water-trefoil and Brook-lime, of each lb. ss. Juice of Woodlice, oz. iv. Juice of Seville-oranges, oz. xij. Mix and filtre, and to every Pound add simple Spirits of Scurvygrafs, dr. ij. Tincture of Amber, dr. j. Mix, and give it.

These Medicines are to be taken on the Days free from Purging; and they ought to be continued with Exactness, till the stagnant Lymph and *Serum* are discharged, and the Infarctions of the Flesh intirely disappear. And when those Ends are once accomplish'd, the Sick may abandon the above, and in their stead proceed to take the bitter Infusion of *Roman* Wormwood, &c. (as described for an *Ascites*) using at the same time *Spaw* Water, and riding on Horseback.

Hydropic Persons, under any of these three general Kinds, though haply they may be cured, to Appearance at least; yet are they very subject to Relapses, if the Solids and Fluids are not restored to their due Strength and Vigour: Wherefore great Care and Circumspection ought to be used, in order to prevent it: And the Method I have recommended to answer that End, will, I flatter myself, be equal to any thing that can be proposed. Indeed, I promise myself, that the general Process which I have laid down for every Stage, Circumstance, and Indication of the Diseases, may (though very brief and concise) challenge the whole *Materia Medica* to afford one better for the Purpose.

As concerning the *Hydrocephalus*, or Dropsy of the Brain, the *Hydrops Uteri, aut Ovarii*, and those of some other abstracted Parts of the Body; I believe we may modestly presume to pronounce upon them, that they lie without the Pale of curable Diseases; and consequently it would be but Time lost to say any more about them. But, suppose the contrary, viz. that they are possible to be cured; I believe a better Remedy will scarce be found, than may be drawn from those above-directed.

C H A P. XXII.

Of a TENESMUS.

THIS is a Disease, or rather Disorder, that is not unfrequent: And tho' it is sometimes pretty troublesome, yet it is seldom of any great Consequence; indeed, it possibly may terminate in a *Fistula*, if long neglected, or injudiciously treated.

The antecedent or remote Causes may be various; as for Example, whatsoever may or does ingender ill Humours in our Blood. Of this Sort are all Errors, either in our Accretions, or our Secretions: And indeed, the most minute Error or Abuse in the Non-naturals, may produce the like Effect, in proportion to its own Weight. The mediate Cause, then, consists in ill Humours (either acid or acrid) in our Blood: And the immediate Cause is the critical Termination of the supposed Humours upon the *Sphincter Ani*, where by their *Stimulus* they excite a perpetual, or very frequent Desire to Stool; but at the same time contract the sphincter Muscle so forcibly as to hinder Excretion. This specifies the true Nature of the Disease; and in this (its Nature) it may be exactly likened to a Strangury.

The

The Intentions and Methods of Cure will vary according to the original Cause from whence the Disease springs; which therefore ought to be nicely inquired into. If it proceeds from Errors in our Accretions, such as an ill Choice, or Excess, in our Meats and Drinks, whence ill Humours will necessarily be ingendered and formed in our Blood — In such Case those Errors are first of all to be corrected; and then the incumbent Humours are to be altered or expelled: But if it results from Errors or Defects in our Secretions, particularly that of insensible Perspiration; then the softer Diaphoretics (such as will at once sheath and correct the peccant Humours, and promote a free Perspiration) will do the Business.

Suppose the mediate Cause, or (which is the same Thing) the ill Humours that subtend the Disorder, to be produced by ill-chosen Meats and Drinks, and such as ingender a redundant Acidity or Acrimony in the Blood: In such Case the ill Habit must be corrected, as the prudent Physician shall see convenient; but if the like ill Effects flow from an Error or Excess in Quantity, the Quantity must then be moderated, and brought within due Bounds: For a Vice, either in the Quantity or Quality of our Food, is equally capable of producing depraved and offensive Humours in our Constitutions. Perspiration is almost the only Secretion, which, by Errors and Defects in it, can be culpable in this Case. To remedy the Evil, supposing it to flow from that Cause, I advise as follows; *viz.* First, draw Blood from the Arm, to oz. xij. — Then

Take Calomel, gr. xv. Venice Treacle, dr. j. Make a Bolus, to be taken at Night going to Bed, every third Night; and the next Morning the following Potion:

Take Gereon's Decoction of Sena, oz. iij. Manna, oz. j ss. Oil of sweet Almonds, oz. j. the Yolk of one Egg, to make a Potion.

Take

Take Lac Sulphur. dr. fs. Gum Guaiacum, gr. xij. Medicinal Antimony, gr. viij. Venice Treacle, scr. ij. Syrup of Marshmallows, q. f. to make a Bolus, to be taken every Night and Morning, upon those Days when the Patient hath not taken a Purge, drinking after, a Draught of the following Decoction:

Take Root of Spanish Scorzonera, oz. ij. Of Sarsaparilla and knotty China, of each oz. j. The Five opening Roots, of each dr. v. Mix and boil in q. f. of Elder-flower Water, to lb. ij. when strained; to which add, Syrup of Elder, oz. iij. Mix, and give it.

By the due Use of these Medicines, both the Cause of the Disease, and the Effect, (which is the Disease itself) will soon be removed; that is, the incumbent offending Humours will be corrected or expelled, and the Formation of others effectually prevented.

If the Disease in question arises from the second Cause assigned, viz. from Excess or Intemperance in Eating and Drinking; in that Case I advise as follows—

Take *Poterius's* Antihectic, Martial diaphoretic Antimony, and Rhubarb, of each gr. xv. Rob of Juniper, dr. j. Make a Bolus, to be taken every Morning, and at four o'Clock in the Afternoon, drinking after, a large Draught of the following Decoction:

Take the Five opening Roots, of each dr. vj. Cream of Tartar and Tamarinds, of each oz. j. Mix, and boil in q. f. of Water, to lb. ij. in which dissolve Manna, oz. ij. Give it.

Take our Electuary of Quicksilver, dr. iv. Make a Bolus, to be taken every Night, going to Bed.

If the first Cause assigned stands charged as the Author of this Disease, the following Method is then to be preferred:

Take Ipecacuana in Powder, scr. j. Emetic Tartar, gr. iv. Conserve of Hips, q. f. to make a Bolus, to be taken at six o'Clock in the Evening, drinking plentifully of thin Gruel, between vomiting.

Take

Take Salt of Wormwood, dr. iij. Old Hock, oz. xx. Treacle-water, oz. iv. Syrup of Succory, with Rhubarb, oz. iij. Simple Spirit of Scurvygrafs, dr. iij. Tincture of Metals, dr. j ss. Mix for a Julep, and drink five Spoonfuls after every Dose of the following Electuary:

Take Æthiops Mineral, dr. vj. Rhubarb and Contrayerva-root, of each dr. ij. Myrrh, dr. j. Rob of Elder, oz. ij. Syrup of Marshmallows, q. s. to make an Electuary; of which take the Quantity of a Nutmeg, every sixth Hour.

A *Tenesmus*, consider'd as an Effect of the last-mentioned Cause, (*viz.* an ill-chosen, depraved Food) may be cured, either by the Digestion and Concoc-tion, or else by the Dissolution and Comminution, of the morbid Humours: Therefore I have adapted the Process to answer both those Intentions, that in case one should not take place, the other may.

C H A P. XXIII.

Of RUPTURES.

THE Nature of these Disorders is sufficiently expressed by the Name; and their Intentions of Cure are too obvious to need mentioning here. I proceed therefore to recommend such Methods of Cure, as, in my Judgment, bid fairest for Success. And, first; of whatsoever Kind, Part or Distinction, the Rupture may be, let the lapsed Substance be first of all restored, and afterwards secured in its proper Place with a convenient Bandage——As to Internals;

Take Lapis Hæmatites prepared, and astringent Saffron of Steel, of each dr. v. Mastich and Olibanum, of each dr. ij. Dragons-blood and Japan Earth, of each scr. iv. Plumous Alum levigated, scr. ij. Chio Turpentine, q. s. to make a Mass, fix Pills
to

to be made out of every Drachm; four of which are to be taken thrice a Day, drinking after, eight Spoonfuls of the following Mixture:

Take Oak-bark dry'd, oz. ij. Pomegranate-peel and Myrtle-berries, of each dr. v. Mix and boil in q. f. of red Port-wine, to lb. ij. when strained; to which add Tincture of Coral, and *Mynsicht's* Tincture of Steel, of each dr. iij. Mix, and give it.

If the designed End should not be attained by the Use of the above, recourse must then be had to our Styptic Elixir, described at the End of the Book.

It is usual to apply astringent Plaisters to the Groin, under the Truss or Compress: To which End I advise the following; *viz.*

Take the Rupture-plaister, and our Styptic Elixir, of each equal Parts; melt them together over a gentle Heat, continually keeping stirring, and evaporate, till it comes to the Consistence of an Emplaster.

Spaw Water, Riding, and Cold-bathing, are to be diligently practised.

I shall perhaps stand charged of Heterodoxy, as I advise Riding in these Disorders: But against any such ill-grounded Charge, I enter a seasonable *Caveat*. Be it consider'd, then, that tho' all Exercise or Motion whatsoever seems bad (*in prima facie*) under all Kinds of Ruptures; yet the Exercise of Riding will abundantly compensate for the necessary and ordinary ill Effects of Motion, as it will greatly assist the *Spaw* Water and cold Bathing, in strengthening and restoring the attractile Force of all the Solids; without which a complete Cure can neither be proposed, nor so much as hoped for.

There are other Disorders, which, according to the *Latin* Expression, seem to be of the same Family; such as the *Hernia carnosa*, *ventosa*, and *humoralis*: But these are perfectly foreign to those that make the Subject

Subject of this Chapter, both in their Natures and Method of Cure.

True, genuine Ruptures are divided and distinguish'd into three Sorts; as, the *Exomphalos*, the *Hernia intestinalis*, and *omentalis*. The *Hernia intestinalis* is not without Danger, and sometimes is fatal, when the Excrements residing in the prolapsed Gut become hard, and unable to be pushed forwards. When such a Circumstance is suspected or feared, the Patient should be plied with oily, laxative Things, both inwardly by the Mouth, and Clyster-wise — And these Things are very repugnant to the common Intentions of Cure.





BOOK III.

Of FEVERS in General; including those of the Eruptive Kind.

CHAP. I.

Of the EPHEMERIS, or Simple Fever.

THIS is, of all Fevers, the most simple in its Kind, the most mild in its Degree, and the shortest in its Duration.

This Fever may arise from various Causes: *Ex. gr.* from a slight Cold; a heavy, foggy, dense Air; a Surfeit, or indigested Meal; Intemperance in Eating and Drinking, or over-heating by violent Exercise. In a word, it may arise from whatsoever can augment the Quantity, vitiate the Quality, or increase the Action, or *Momentum Motus*, of the Blood and Humours. Hence it will appear, though the Disease, in its Nature, is always the same, *viz.* a *Simple Fever*, that its Essence must vary, according to the Causes from whence it proceeds. As, for Example: If it proceeds from catching Cold, its Essence then consists in Repletion, and a Surcharge of saline Lentor: If from a heavy, foggy, dense

dense Air, the Effects, and consequently the Effence of the Disease, will be comparatively the same. Be it observ'd, I don't suppose the excretory Pores will be constipated and obstructed barely from such a State of Air; but that the Spring and Action of the Fluids will be lessen'd upon the Surface of the Body, and then the Secretion of perspirable Matter will become proportionally languid and defective. I have spoken somewhat largely of *Surfeits* upon another Occasion; and have made it plainly appear, that they are capable of producing various Distempers, either in the Blood, or the *Primæ Viæ*.

It is reasonable to suppose, that such Surfeits as produce the *Ephemeris*, or *Simple Fever*, are very mild and gentle in their Nature; for the Effects of Surfeits will always be in the compound *Ratio* of their respective Quantities and Qualities, and the Constitutions in which they happen.

Errors or Defects in our Digestions (whether the first, second, or third) may produce a Fever of this Sort, which will necessarily be in proportion to the suppos'd Errors or Defects. For whether Digestion, which (in that Seat we commonly style Concoction) is actually defective in the Blood-vessels themselves, or whether indigested, crude Humours, are intromitted from the *Primæ Viæ* through the *Lacteals* into the Blood, they may give a preternatural *Stimulus*, excite inordinate Commotions and Effervescences, and all the other Symptoms of a simple Fever; that is, a Fever void of Malignity. To the immediately preceding Cause may be ascribed all the ill Effects of Intemperance, whether in Eating or Drinking: For no Degree of Excess, either in one or the other, could materially offend the Constitution, provided the Meats or Drinks were first perfectly digested in the *Primæ Viæ*, and afterwards assimilated by the Blood.

Violent Exercise (especially in hot Weather) puts in its Claim likewise; for this agitates the Fluid too much,

much, and very often over-heats and liquifies it: Moreover, thereby the *Pinguedo*, or Fat, is sometimes melted down, is absorbed by, and carried with the Blood in the Course of its Circulation. But this Circumstance is (for Distinction's sake) commonly, and not improperly, call'd a Surfeit of the Blood. This extraneous Matter, (extraneous to the Blood, I mean, though not so to the Constitution) circulating with the Blood, must necessarily distemper it. And besides, it will subject it to Stagnation in the capillary Arteries and Lymphatics; the Consequence of which ('tis easy to conceive) will or may be a Fever.

This Sort of Fever (its mediate Causes, or constituent morbid Humours, being extemporaneous, and consequently having acquired no Degree of Density, Solidity and Obduracy) generally extinguishes or recedes of itself, in the Space of a Day or two: In which Cases there is scarce Room or Reason for the Application of pharmaceutical Remedies. Plenty of warm, diluting Liquors, may do the Business very happily and effectually. But then, should it (contrary to Expectation) continue beyond the ordinary Period, it may possibly degenerate into a worse Kind of Fever; and therefore it may not be amiss, that some cautionary Methods be used, to expedite and ascertain the Cure.

Accordingly, if the Fever arises from catching Cold, and Repletion, which is a necessary, and (indeed) the first Effect of it, the Intentions of Cure consist in Evacuations. To which End Bleeding, and mild gentle Diaphoretics, will answer best.

Bleeding being premised,

Take Flowers of Sulphur, dr. iv. Lapis Contrayervæ, dr. ij. Cochineal, scr. ij. white Sugar-candy, dr. j. Make a Powder, to be divided into eight Papers; and one to be taken every fourth Hour, with four Spoonfuls of the following Julep:

Take alexiterial Milk-water, oz. viij. Treacle-water, and Syrup of Elder, of each oz. ij. Mix for a Julep.

If

If the Patient be costive, the following Glyster may be injected :

Take emollient Decoction, oz. xij. Sea-salt, dr. iij. Honey of Herb-mercury, oz. ij. Make a Glyster.

These Things should be assisted with Plenty of warm, diluting Liquors ; such as a small Sack-whey, or a Tea made of Maiden-hair.

If a heavy, foggy, damp Air, stands charged as the Cause of this Fever, Bleeding in such case should be avoided, and the Use of warmer Sudorifics be instituted. I advise thus :

Take Lapis Contrayervæ, dr. ij. Saffron and Virginian Snake-root in Powder, of each scr. ij. white Sugar-candy, dr. j. Oil of Nutmegs, gtt. xij. Make a Powder, to be divided into six Papers ; one of which is to be taken every six Hours, drinking after, six Spoonfuls of the following Julep :

Take Carduus-water, oz. vj. Treacle-water, oz. iij. Sal volatile Oleosum, dr. j ss. Syrup of Clove July-flowers, oz. j. Mix for a Julep.

If the Patient is costive, attended with any Pain in the Head, give the Glyster above-described ; or, rather, a Dose of *Tinctura Sacra*, to purge him gently.

In this Case the Sack-whey, and other common Drinks, should be more warm and spirituous.

If the Disease in question results from a Surfeit begun in the *Primæ Viæ*, the Indications are, 1st, To cleanse by an Emetic. 2^{dly}, To correct and alter, or to digest and concoct the offending Humours. 3^{dly}, To discharge them by some Secretion ; of which the best are by Urine, or breathing Sweats ; though sometimes they are very easily and conveniently carried off by Stool. After the Emetic is over, I recommend the following :

Take diaphoretic Antimony, dr. ij. white Amber prepar'd, dr. j ss. choice Rhubarb, dr. j. Contrayerva-root, and white Sugar-candy, of each dr. ss. Oil of Cinnamon, gtt. iij. Make a Powder,

to be divided into six Papers ; of which take one every fourth Hour, drinking after, four Spoonfuls of the following Julep :

Take Salt of Wormwood, dr. ij. fresh Juice of Lemons, oz. iij. Mix ; and when the Fermentation is over, add Carduus-water, oz. iij. compound Syrup of Mint, dr. x. Tincture of Elecampane-root, dr. iij. Mix.

Or, in place of the above,

Take Dr. Bates's Pulvis pepticus and Saffron, of each scr. j. white Sugar-candy, dr. ss. Mix for a Powder ; to be taken every sixth Hour, with five Spoonfuls of the following Mixture :

Take Salt of Wormwood, dr. iij. Juice of Lemons, oz. iij. Mix ; and when done fermenting, add Elixir Salutis, oz. viij. Mix.

I prefer the last Process, because by means of that the morbid Matter will not only be prepared for Secretion, but the three Ways destin'd will be equally endeavour'd ; and Nature's Propensity being added, (which way soever she is inclin'd, whether for Sweat, Urine, or Stool) will turn the Scale that way.

Should the Disease take its Rise from Indigestion, or an Act of Gluttony, the Indications of Cure will be much the same as in the Case immediately preceding ; and, consequently, the same Remedies will answer. But if it proceeds from Intemperance, or excessive drinking of ardent, spirituous Liquors, the Indications will be, to sheath and assuage the Fury of the hot, fiery Particles, and at the same time to promote the Digestion of them. The first of these would be a palliative Cure ; but the last will be a perfect one. However, both Intentions may be brought within the Compass of one Prescription, and may be answered at the same time. To which Purposes,

Take Lac Sulphur, and Sal Polychrest, of each dr. ij. Rob of Elder, oz. ij. Mix for an Electuary, Dose dr. ij. to be taken every fourth Hour, drinking after, a Glass of the following Apozem :

Take Raisins, oz. iv. Root of Marshmallow fresh, and Spanish Scorzonera, of each oz. ij. true Maiden-hair, oz. j. Let them be

be boil'd in q. f. of Water to lb. ij. when strain'd; in which dissolve Manna, oz. iij. Make an Apozem.

Sack-whey will be proper for common Drink; which being drank plentifully, will answer in some measure the Purpose both of Digestion and Sweat.

If violent Exercise is the sole Parent of this Disease, then it will soon recede of itself; except the *Pinguedo*, or *Fat*, being melted down, is absorbed by the Blood, and carried with it in the Course of its Circulation. In such Case the Intentions of Cure are reducible to one only: And this is, to break or dissolve the spherical or globular Particles of this foreign Guest, that they may mix intimately and uniformly with the Blood; and then their Substance will soon be precipitated by Urine, or be thrown off by Perspiration. To which End,

Take Bezoar Mineral, and martial Diaphoretic Antimony, of each dr. j ss. Russia Castor, and Salt of Amber, of each dr. ss. Make a Powder, to be divided into six Papers; one of which let be taken every sixth Hour, in six Spoonfuls of the following Julep:

Take Carduus-water, oz. xij. volatile Sal Armoniac, scr. ij. Syrup of Elder, oz. iij. Mix for a Julep.

Take Tincture of Amber, dr. iv. plain Spirits of Hartshorn, dr. ij. Mix, and take gtt. xxx. thrice a Day, in a little Draught of common Drink.

Considering that this Species of Fevers is the most mild and simple of the whole Tribe, it may be thought perhaps, that I have been very copious, or rather tedious, in treating of it. But, in answer to such Objections I shall only observe, that I have purposely chosen to treat this Fever copiously, and very minutely; as I am sure the skilful Physician will find Occasion to extend and apply the Theory and Practice here laid down, to many other Circumstances, that may present to him in the Course of his Practice.

C H A P. II.

Of a BURNING FEVER, or Calenture.

THE particular Characteristic, or distinguishing Mark of this Disease, is an intense Heat or Burning all over the Body; especially in its Superficies or Skin. It is rarely attended with any direful Symptoms, or such as prognosticate Danger; but the Fever is manifested by a quick Pulse, Thirst, and the mention'd Heat or Burning.

It would be somewhat difficult to find out and ascertain the antecedent or most remote Causes of this Species of Fevers; though the mediate and immediate Causes of it are, I think, pretty obvious and plain. As for Example:

The mediate Cause necessarily implies a vitiated State of Blood and Humours, which are retaining to a hot, fiery Nature; and the immediate Cause, or *Causa proxima*, consists in the critical Determination of the supposed hot, fiery Particles, on, and their Obstruction, in the Glands, on the Superficies of the Body, as well the internal as the external: But how, or by what Means, those hot, fiery Humours, are generated or introduced into the Blood, that is the great Question; and, indeed, it is what I shall not undertake to resolve. I could, however, offer many Conjectures about them; but then they would be so far short of a rational Demonstration, (which I would always appear to give) that I rather chuse to conceal them.

As to the mediate Cause, (which comprehends the Essence of the Disease) it consists, as above-said, in hot, fiery Humours, that affect in some measure the whole System of the Solids and Fluids, but are particularly thrown off and determin'd on the outer and inner

inner Surfaces of the Body ; where, by stagnating in the Extremities of the capillary Arteries, and lymphatic Glands, they act more violently and sensibly. And in this their particular Determination on, and Stagnation in, the superficial Glands and Vessels of the Body, lies (as above-observed) the immediate Cause.

A Physician who judges of Things in *prima facie* only, or sees them no further than Skin-deep, would content himself, perhaps, with prescribing such Things as might either cool, condense and repress, or else sheath and obtund, the hot, fiery Particles. But such Things (believe me) will only serve to palliate the Effects or Symptoms, whilst the Cause of the Disease still remains the same. And furthermore ; whereas Nature herself might possibly bring about a Cure, if not disturb'd, such Methods may interrupt and circumvent her, by weakening or obstructing her Efforts. The Intentions of Cure, however, are to palliate and assuage the Symptoms, in some measure, by such Things as obtund and sheath the hot, irritating Humours. But then our chief Aim and Endeavours ought to be levell'd at the Root of the Distemper, by applying such Medicines as may either alter and correct, attenuate and dissolve, or digest and concoct, the said peccant Humours. And the third and last Intention is to expel and discharge them, by some proper Secretion. To answer all which Purposes, I advise as follows ; *viz.*

In the first Place, take away oz. xij. of Blood. Then,

Take Æthiops Mineral, dr. iv. Martial Diaphoretic Antimony, and white Amber prepared, of each dr. ij. Rob of Elder, oz. ij. Make an Electuary ; of which take the Quantity of a Nutmeg every fourth Hour, drinking after, oz. iv. of the following Emulsion :

Take white Poppy-seeds, oz. j. the Four greater cold Seeds, of each dr. v. Sweet-almonds blanch'd, N^o. xxx. white Sugar-candy, oz. iiij. Let them be beat well into a smooth Paste [adding a little cold Water in the beating, to keep it from oiling] : After this

is done, add by little and little of the following Decoction cold, lb. ij. Make an Emulsion, in which dissolve Crystal Mineral, dr. iij. Mix.

Take Scorzonera-root, oz. ij. French Barley, oz. j. the Five opening Roots, of each dr. vj. Mix, and let them be boil'd in q. f. of Water to two Pints, when strain'd.

After the above Method has been practised for the Space of four or five Days, or so soon as the burning Heat sensibly abates, then abandon the above, and proceed with the following:

Take Pulp of Cassia, and Crystals of Tartar, of each dr. iij. Calomel prepar'd, gr. x. Oil of Aniseed, gtt. v. Purging Syrup of Rose, q. f. to make a Bolus: To be taken in the Morning, and to be repeated every third Day.

If the Distemper should be attended with a Vomiting, an Emetic must be ordered: If with Pains in the Head, an emollient Glyster, to be repeated every Evening; and if threatened with a *Delirium*, Blistering will be adviseable.

A small Sack-whey will be proper for the common Drink; which should be drank freely, in order to dilute and eliminate the morbid Humours by breathing Sweats.

I promise myself, the above Method is well calculated to answer every Indication; and, if duly administered and pursued, will not fail to effectuate a Cure, without any Addition or Alteration; except some extraordinary and unforeseen Accident require it.



C H A P. III.

Of a SCARLET FEVER.

THE distinguishing Mark of this Kind of Fever is a very florid Appearance in the Skin, throughout the whole Body : It somewhat resembles the first Eruption of the *Measles* ; only this is a more flaming Red, and admits of no Interstices, as in the *Measles*. But this is somewhat foreign to my Purpose ; which is not to describe the Symptoms and Appearances of Diseases, but to explain and account for their Causes, &c.

This Species of Fevers (whenever it appears) is epidemical, or at least is, generally speaking, so ; and consequently its Origin, or first Cause, must exist either in the Air, or the Soil ; that is, either the Air, or the Soil, must be vitiated and infectious.

The morbid Humours which immediately subtend this Disease, or (which is the same thing) constitute its *Causa media*, must necessarily be of a very subtil, explosive Nature : They manifestly rarefy and expand the Blood to so great a Degree, that all the capillary Arteries are immoderately distended with it ; and this (which may be styled the *Causa proxima*) causes the flaming red Colour all over the Body. As to the common internal febrile Symptoms, they are not the most acute in this Sort of Fever ; which specifies, that the Bulk of the morbid Matter is determin'd outwardly on the Superficies of the Body.

The curative Intentions are, 1st, To assuage the preternatural Ferment and Rarefaction of the Fluid. 2^{dly}, To alter and correct the morbid Humours. 3^{dly}, and lastly, To expel and discharge them by Sweat, Urine, or Stool.

To answer these Purposes, I recommend as follows:—
First, let there be taken away oz. xij. of Blood.

If the Stomach be affected with Heaviness, Sicknefs, Loathing or Vomiting, let a Vomit of *Ipecacuana* be administer'd in the Beginning.

Take *Æthiops Mineral*, dr. iv. *Poterius's Antihectic*, and martial Diaphoretic Antimony, of each dr. ij. white Sugar-candy, dr. j. Make a Powder for eight Papers; of which take one every fourth Hour, drinking after, a Glass of the following Apozem:

Take Spanish Scorzonera-root, oz. ij. Sarsaparilla and China, of each oz. i. the Five opening Roots, of each oz. ss. Leaves of Scordium, m. j. Let them be boil'd in q. f. of Water to lb. ij. when strain'd; to which mix Syrup of Elder, oz. iiij. Spirits of Nitre dulcify'd, dr. iiij. Mix for an Apozem.

If Pains in the Head attend, order the following Glyster; to be injected every Evening, till they go off:

Take emollient Decoction, oz. xij. Lenitive Electuary, oz. j. Sea-salt, dr. iv. Mix for a Glyster.

Some Physicians might content themselves (perhaps) with prescribing the sub-acid, cooling Salts, in these Sort of Fevers; as they would undoubtedly condense the Blood, and consequently repress its inordinate Ferment and Rarefaction. But be it consider'd, that the morbid Humours, still retaining their ill Habit under such a Practice, would be the more fixed and riveted; that is, though their Ferment was suppress'd, their Density and Solidity might be increased: Whereas, by the Remedies I have directed, they will be either corrected or destroyed, and all their Effects will recede in Course.



C H A P. IV.

Of MALIGNANT FEVERS.

THE *Medium*, or middle Degree, betwixt the mild and simple, and the most complex or pestilential Fevers, are what we call malignant.

But *malignant Fevers* are very various, multiform, and almost indeterminate, in their Appearances. For Example; there is the *Spotted Fever*, the *Miliary*, the *Small-Pox*, the *Measles*; and, indeed, most other Fevers of the eruptive Kind come under this Denomination.

Whenever a Fever is attended with a low, depress'd, quick, unequal Pulse; a *Subsultus Tendinum*, *Delirium*, *Coma's*, *Sopor's*, *Stupor's*, and such-like; *Cardialgia's*, great Dejections of the Spirits, Faintness, &c. it is always term'd *Malignant*. Besides these, the Urine may serve as another Characteristic, which, in Malignants, is generally thin and inflam'd; the Eyes look glaring, but deadish, and void of Lustre; the Tongue is very parch'd and dry: In a word, the whole Countenance and *Fauces* are generally sufficient to declare the *Genus* of the Fever, though no other Symptoms should present to attest and confirm it.

I was indispensably obliged to enumerate some of the most common characteristical Symptoms of this Fever, because 'tis on account of those Concomitants that it obtains the Distinction of *Malignant*. Moreover, though all these Symptoms may not concur in every Fever of this Sort, yet three, four, or the major Part of them, are always sufficient to specify the *Genus* of the Fever, and to pronounce it malignant.

It appears from the Anatomy of this complex Word, that the Ancients look'd upon every Fever to be a Fire
in

in the Blood; and that this particular Species was one of a more intense and virulent Nature.

'Tis certain, that Heat is inseparable to Fire; but, on the other hand, Fire is not always the Companion of Heat. However, Heat, wheresoever situated or reposed, (whether in Bodies animate or inanimate) as it increases in Degree, so it approaches towards Fire in Proportion. Now every Fever is accompanied with, or rather specified by, an increased Heat of the Blood: And this characteristical Heat will always be proportional to the Quality and Quantity of the morbid Humours that subtend it; for these Humours will necessarily augment the Velocity of the Fluids, and the vibrative Force of the Solids, in the compounded *Ratio's* of their respective Quantities and Acrimony; whence will arise a preternatural Heat of the Body.

Several Sorts of malignant Fevers are, in their Nature, contagious; which sufficiently testifies concerning the Rarity and Subtilty of their venomous Essence.

When a malignant Fever is so rife and general, as to be call'd epidemical, we may reasonably conclude, that its first Causes are ingender'd either in the Air, or the Soil: But when it is more rare and accidental, we may then presume its Causes were originally formed in the Blood.

That the *Primordia*, or original *Stamina*, of this Fever, (or indeed any other) may, with equal Possibility, be formed either in the animal Blood, in the Air we breathe, or in the Soil we live upon, is certain; for as the former is evidently subject to Distemperatures, Shocks and Convulsions, so are both the latter: But where or howsoever the antecedent or most remote Cause is generated, the mediate Cause is always the same; only as it may differ in Degree, in different Subjects. And this mediate Cause (in which the Essence of the Disease is express'd likewise) consists in a Perversion and Depravation of the animal Fluids,
caused

caused either by the Generation and Formation of noxious Humours immediately in the Blood, or by the Intromission of malignant *Effluvia* from without.

It may be wished and expected, (perhaps) that I should determine on the particular Nature, Figure, and Quality, of the morbid Humours that subtend this Disease: And, indeed, I should be very glad to do it. But, alas! that is a Thing utterly impossible; for the utmost Extent of human Reason can go no further than Conjecture about them, as they lie beyond the Scrutiny of our Senses. Was it possible we could determine on, and ascertain the precise Nature, Figure, Quality, Solidity and Magnitude of these peccant Humours, we should then (indeed) be able to direct our Methods of Cure with greater Surety of Success. But however, (since the best of Conjurors are but good Guessers in things of this Nature) it may be of no small Use and Importance, to know and affirm, that the constituent Humours of these Kind of Fevers are of a very stimulating, irritating Nature. And hence, 1. That they will necessarily stir up preternatural and violent Agitations, Rarefactions, and Ferments, in the animal Fluids. 2. That they will increase the *Ætus*, or vibrative Force, of all the elastic Solids; especially the arterial Vessels, and nervous Fibres. 3. That they will stimulate, irritate and vellicate the Nerves themselves. 4. That they will transpose and confuse the natural Order and Œconomy of the animal Spirits, and so produce Faintness, *Syncope's*, *Deliquia*, &c. and, in one word, throw the whole animal Frame into Confusion.

I have already observed, that the constituent morbid Humours that subtend malignant Fevers, are sometimes generated, or gradually formed, in the Blood, independent of any extrinsic Cause. At other times, again, they are imbibed from an infected Air, or received from a poisonous Soil (as is the State of the Case, only in a higher and more exalted Degree, in the

the Commencement of all pestilential Fevers and Plagues).

When the *Primordia*, or original Seeds of these Fevers, are imbib'd from the Air, it must either be in the Act of Inspiration, or else by the Pores of the Skin. But when they result to us from a poisonous Soil, we doubtless receive them with our Food, especially the vegetable Part of it.

'Tis very wonderful, and even stupendous, to consider, that a venomous *Miasm*, or Vapour, (the whole of which, could it be collected, condensed, and weighed, would not amount to half a Grain, perhaps) when transmitted into the Blood of an Animal, should be capable of producing such dismal and fatal Effects. And if this is sometimes the State of the Case, which, I think, is a Truth too obvious to be denied; it may serve, in great measure, to put an End (by throwing it intirely out of Doors, I mean) to that confused, mysterious Controversy, that has so long subsisted, and been so warmly debated, concerning *Acids* and *Alkalies*: And likewise concerning *Salts*, whether they be the *nitrous*, the *nitro-aerial*, the *nitro-aerial sulphureous*, with many other unintelligible, confused Distinctions, that the Adepts in Chymistry have introduced; which some systematic Writers charge with being the chief Authors of Diseases.

But undoubtedly, the supposed *Miasm*, or poisonous *Effluvia*, when impress'd on the animal Fluids, do first contaminate and pervert the whole Mass, at least the serous Part of it (for that is most susceptible of Alteration and Depravation); and by that means change it into their own specific Nature and Essence. This is so far from a Thing impossible, that 'tis very reasonable to suppose. And to give further Strength and Weight to this Conjecture, we need only consider the Nature, Propagation, and Progression of Fire and Ferments. These Things (or rather let me call them Modes and Qualities of Things) may be multiplied

tiplied and extended *ad infinitum*; for so long as they meet with a suitable *Pabulum*, they will act upon every thing they approach to, or mix with, so as to convert it into their own Natures, and assimilate it to themselves.

The Salts in animal Blood are, doubtless, subject to Changes and Depravations, with regard both to their Figure and Bulk, in common with the other constituent Parts of the complex Fluid. But why they should be tortured and loaded with so many hard, unintelligible Names, I cannot see a Reason.

'Tis most certain, Salts can never lose their Nature, as Salts; but then they may be alter'd and chang'd, in Figure, Magnitude, and Taste; and thus from a benign, wholesome, inoffensive Taste, may acquire a predominant Acidity or Acrimony: And such Salts as would impart a piquant, acrimonious Relish to the Palate, if applied to it, will undoubtedly, when flowing with the Blood in the Vessels, excite preternatural Ferments and Perturbations in the Fluids, and an exorbitant *Nisus*, or Vibration of the Solids. But besides this supposed distemper'd State of the Solids and Fluids, Obstructions in the capillary Arteries, and the lymphatic Glands, are generally superinduc'd. Hence the lymphatic Glands, and the evanescent Arteries, will be render'd in a State of comparative Inanition; and thence again the Distentions and Vibrations of the leading Arteries will be yet more increased.

I would willingly come as near to the Truth as possible, in explaining the true Nature and Essence of these Fevers; which leads me to be more than ordinary copious, in treating this Part of the Subject. For could we arrive at any probable Certainty in curing this Sort of Fever, and some others which approach to the pestilential Kind, we should, by that means, procure a great Benefit and Consolation to our Fellow-creatures. And certainly these happy

Ends

Ends may be most effectually attain'd, by forming to ourselves, first, a just and adequate Notion concerning the true Nature and Essence of the Disease; secondly, by duly stating, weighing and determining the Intentions of Cure, from the mechanical Consideration of the febrile Constitution, or (which is the same thing) the morbid Humours, as they may happen to be diversely dispos'd and lodg'd; thirdly and lastly, by calculating and proportioning our Methods of Cure to the Intentions given, upon the same Plan of mechanical Reasoning.

As concerning the absolute Species, Figures, Textures, Solidities, &c. of these morbid Humours, I have already given up the Question, as a thing impossible to be discover'd and ascertain'd: As for Example; Who can say, positively, whether they are acid, or alkaline; whether saline, or retaining to the terrestrious?

We know, beyond Dispute, that 'tis chiefly in the Salts, and partly in the essential, caustic Oil of all Vegetables, that their Taste and Virtues consist; and so (in Parity of Reason) we may conclude, that the Salts in animal Fluids are more capable of exciting preternatural Ferments and Perturbations, than the other less sensible and unactive Parts of the same. The terrestrious Parts of vegetative Substances have some Share of Action (however) in both respects; and so, doubtless, have such Parts of the animal Blood as are, strictly speaking, terrestrious. Having thus explain'd the Nature and Essence of this Disease, as far, perhaps, as they are capable of Explanation, I now proceed to consider the Intentions of Cure.

The Intentions or Indications of Cure consist, 1st, In managing the Fever to the best Advantage; that is, by restraining or asswaging the Violence of its Symptoms, without checking, thwarting, or otherwise interrupting Nature. 2^{dly}, In defending and securing, as much as possible, the Brain, and nervous System,

System, from its Attacks; or in seasonably relieving them, when already seiz'd and affected by it. *3dly*, In bringing on an easy, speedy, and salutary *Crisis*. This, indeed, is the grand Point to be pursued, *viz.* the expediting and facilitating an easy, salutary *Crisis*. But then, as this Disease is sometimes attended with a great Variety of Symptoms, many of which may require our particular Regard and Attention; so sometimes the great Business of promoting a *Crisis* must be postpon'd to the Consideration of some one individual Symptom or other, except the general and particular Intentions happen to correspond and coincide.

But before we form our Scheme for promoting a *Crisis*, we should watch Nature very attentively, and observe which way she inclines to bring about the same End; for 'tis always our Business, and our Duty, to assist Nature in her Endeavours, and not to thwart and contradict her, or, in other Words, to counteract her. *Ex. gr.* If Eruptions of any kind whatever appear in the Skin, it would be dangerous to suppress or check them. If kind Breathing-sweats present, it would be preposterous to endeavour the Promotion of Stools or Urine. So, on the other hand, if a mild, gentle *Diarrhæa* comes on, either critically or accidentally; or a copious Discharge of Urine, accompanied with a sensible Diminution of the febrile Symptoms; it would, in such Circumstances, be highly unadvisable to endeavour at any other Secretion.

It would be impossible to lay down any one absolute, general Rule or Method, for the Cure of all Sorts and Degrees of malignant Fevers, because they vary in their Symptoms and Circumstances, in different Subjects. I will therefore, *first*, suppose a particular Case, and such as corresponds with the most common and ordinary Circumstances of this Fever. *Secondly*, I will calculate and adapt the general Method I lay down, to that particular Case. Afterwards, I will take

take a cursory View of the less frequent and extraordinary Symptoms, and will speak to them apart.

Suppose a Person to be seized with a *Rigor*, or Shivering (the ordinary Way of these Fevers invading): This in a little time recedes, and gives place to intense Heat and Burning, attended with severe Pains in the Head, Loins, Limbs, and perhaps in all the muscular Parts of the Body. To these often succeed, or rather are added, *Deliriums*, extreme Sickness at Stomach, *Nausea's*, Vomitings, Dejections of Spirits, Faintness, Palpitations, and severe Pains about the Heart.

Notwithstanding this long and dismal Train of Symptoms, the Physician may flatter himself, that it is no more than an Intermittent, till the Fever has continued without Intermission or Abatement for the Space of a natural Day. But when it has continued thus long, he resolves with himself, that the Fever is continual, and of the malignant Kind. As the Paroxysms of Intermittents seldom or never exceed twelve or fourteen Hours, before they terminate in a Sweat, which is the *Crisis* of the Paroxysm, and consequently when these profuse Sweats come on, the Pains, *Deliria*, and other Symptoms, go off—hence it appears, that the Paroxysms of severe Intermittents do, for the Time of their Duration, nearly resemble malignant Fevers, as to their Symptoms, though not as to their Essence; except in *prima facie* only, and to the injudicious Observer. It would not be unacceptable, perhaps, if we should examine nearly into, and define betwixt, the true Nature and Essence of the morbid Humours that subtend malignant Fevers, and those that constitute Intermittents. But this will be more seasonable in another Place, to which I refer it.

A malignant Fever, express'd by the above-mentioned Symptoms, will be attended with a high, saliant,

saliant, quick Pulse; the whole Visage rosy; the Eyes glaring; the Tongue will soon grow dry, parched, and blackish; the whole *Fauces* will be foul, and the Breath will be tainted with an unfavory *Fetor*, or Stench. These Symptoms (though many others may, as above-observed, happen in this Disease) are always sufficient to specify the Genus of the Fever, and declare it malignant.

I have already delivered my Sentiments pretty largely, concerning the antecedent or most remote, and about the mediate Causes of this Fever; and I hope my Conjectures will be judged to carry the Face of *Vraisemblance* or Probability. It now remains, (before I proceed to state the Intentions, and propose Methods of Cure) that I inquire into the *Causa proxima*, or immediate Cause. And this (as I apprehend) is brought about, and exists, in manner following; *viz.*

When the morbid Humours (whether spontaneously ingendered in the Constitution, or produced from an infected Air, Soil, or the like) have acquired a State of Maturity; which we may suppose to consist in a certain necessary Texture, Magnitude, and Solidity; they begin to aggregate, cluster, and combine together, so as to become unfit for a free Motion and Circulation. In Consequence of this, they will be apt to stagnate, or move too slowly in the capillary Arteries and Lymphatics; and at the same time (by their mutual, intestine Collision, and the *Stimulus* they give to the general Fluid, and its containing Vessels) they will excite inordinate Ferments, Perturbations, and Exacerbations in the Blood, and will augment the *Nisus*, or vibrative Force of the Solids.

This preternatural, disorder'd Condition of the Solids and Fluids, is the true, genuine, internal Expression of a Fever, of what Kind soever it may be: But when the morbid Humours are of a malignant Nature, or are highly acid, acrid, or corrosive, (as

it is always the Case in this Species of Fevers) the Symptoms will be proportionally violent and exorbitant, both in Degree and Number: For the noxious Humours that cause and subtend the Disease (as well those that flow in the arterial Vessels, as those that are stagnant and at Rest in the Capillaries, &c.) will always stimulate, irritate, and vellicate, in proportion to their respective Natures, &c. And hence those exorbitant Ferments, Rarefactions, and Ebullitions in the Blood: Hence that inordinate Vibration in the arterial Vessels, which is manifest by the Pulse of Malignants, especially in the first State of the Fever, before the animal Spirits, and the whole natural Forces, are extenuated. From thence likewise Deliriums, and violent, lancing Pains in the Head, Loins, and Limbs. A Portion of those Humours being protruded upon the inner Surface of the Body, and stagnating in the Capillaries and Glands of the alimentary Duct, cause all those dismal Symptoms we sometimes witness in this Fever: Hence the *Tormina ventris*, or burning Pains in the Guts, attended sometimes with *Diarrhœa's*, and sometimes with a stubborn Constipation: Thence those burning Heats at the Stomach, Sickness, *Nausea's*, and Vomiting. The same Humours, partly dispensed upon the Heart, cause Palpitations, Faintnesses, *Syncope's*, *Cardialgia's*, &c. The like Humours seizing on, and obstructing in the finer Vessels and Glands of the Tongue, *Fauces*, and Throat, cause that insupportable Thirst, Dryness, and Parchedness of the Tongue, &c. that Furredness of the Mouth, and the ill-favour'd *Fetor* or Stench in the Breath. These same Humours, in proportion as they stimulate, irritate and vellicate the nervous Fibres and Membranes, cause Spasms, *Subsultus's*, &c. When they invade the *Meninges*, they may produce *Syncope's* again, Faintings, and sometimes Convulsions: But when they obstruct in the smaller Vessels and Glands of the Brain, they produce
Coma's,

Coma's, Stupors, Sopors, and the like. We have numerous Instances of Fevers, whose constituent Humours have so high and exalted a Malignity, as to cause Mortifications and Gangreens, when or where-soever they are critically determined and disposed, so as to centre and stagnate. Having thus defined the *Causa proxima*, or immediate Cause of this Fever, and explained by what Mechanism it produces its various Symptoms or Effects; I now come to consider and digest into Order the proper Methods of Cure.

The curative Indications have been laid down long ago, to which we allude; and to answer which, we propose as follows; *viz.* In the first place, take away oz. xij. xv. or xx. of Blood from the Arm, according to the Strength and Temperament of the Patient.

I advise to begin with Bleeding, in all malignant Cases whatever; because (notwithstanding what some over-nice, supercilious Gentlemen of the Faculty may object against it, of its weakening the Blood and Spirits; and consequently of its enfeebling Nature, and disqualifying her for the Performance of the great Work she has upon her Hands) by depleting the sanguinary Vessels, we give more Scope for the remaining Fluids to play in; in which Circumstance or Condition, any Alteration or Change, necessary to be wrought upon it, (whether it may be the Dissolution, Division, Comminution, Digestion, or Concoction of its morbid Matter) will be more easily, happily and speedily brought about. Moreover, the *Impetus* and Pressure of the Blood upon the Brain, and the other *Viscera*, as also upon all the obstructed Vessels, will be lessened by it. Such Obstructions as may be already formed in the Capillaries, &c. will be more easily dislodged and removed; and the Designs of Revulsion from the Brain, or elsewhere, will be greatly facilitated: But, *Sydenham* has produced so many and weighty Instances to prove the Utility of

Q 2

Bleeding,

Bleeding, in pestilential Cases, as may be sufficient to justify the Practice of it in common Malignants. 2dly, About three Hours after Bleeding, take the following Emetic:

Take Ipecacuana, powdered, scr. j. Mint-water, dr. x. Oxymel of Squills, dr. iij. Mix for a Potion, to be taken three Hours after Venesection, drinking plentifully of Carduus Tea between the Vomitings; and when the Operation of the Vomit is ended, take the following Draught:

Take Lapis Contrayervæ and Bezoar mineral, of each scr. j. Mint-water, oz. ij. Treacle-water, and Syrup of Poppy-heads, of each dr. vi. Liquid Laudanum, gtt. x. Mix for a Draught.

The above are only Things preliminary; Bleeding being instituted merely to deplete the Vessels; Vomiting to cleanse, and the paregoric Draught to comfort and strengthen the Stomach after the Operation, and to compose the over-agitated Blood and Spirits, which must necessarily be hurried by the working of a Vomit, under such Circumstances. These Things being premised, we are to set about the great Work of promoting an easy, speedy, and salutary Crisis; especially if no extraordinary Symptoms intervene, of such Importance, as to demand our more immediate Care and Attention.

This great Work (however) is not to be hurried on precipitately: For (says *Hippocrates*) *Concocta, non cruda, sunt excernenda*. By this Expression *Hippocrates* meant, doubtless, in general Terms, that the morbid Matter should be prepared and fitted for some Secretion (whether by Stool, Urine, Sweat, or cutaneous Eruptions) before any actual Attempt is made to secrete it.

The morbid Humours may be prepared and fitted for this Purpose, various ways; viz. either by altering their Figures, dividing and comminuting their Substances, breaking their mutual Cohesion, and destroying their intimate Union with the Blood; or, lastly,

lastly, by promoting and perfecting their Digestion and Concoction.

When any one of these Changes or Alterations is wrought upon the constituent, morbid Humours of a Fever, the Disease will be greatly asswaged, if not intirely resolved and cured: For, first, altering or changing the very Figure of their minute, constituent Parts, will probably divest them of their Sting, and so render them offenceless to the Constitution. Secondly, dissolving, breaking and destroying their mutual Cohesion, and their close Union with the Blood, will not only enervate and weaken their Force; but will likewise prepare and dispose them for some Secretion. Thirdly, The Division of their Substances, and the Comminution of their constituent Parts, will tend to, and fit them for, the same Purposes. Fourthly, The perfecting their Digestion and Concoction, will intirely disarm them; so that, should they afterwards remain fluctuating in the Blood, they would be incapable of offending materially, at least, in a febrile Sense. We should, however, in prosecuting this great and principal End, have strict Regard to the particular Symptoms that may present: We should have the Fever always in our Eye; which we must endeavour to manage to the best Advantage; that is, by curbing and restraining it, when too luxuriant and raging; and raising it, when at too low an Ebb; and this latter more especially, when cutaneous Eruptions appear: In a Word, at the same time that we are levelling our utmost Efforts to sap and extirpate its Cause, we must not neglect or disregard its Effects or Symptoms.

The Physicians of the present Time are greatly divided in their Opinions, concerning the Business of Sweating in these Fevers. Some applaud it highly, and prescribe it indiscriminately, not only in all Fevers, but in all Circumstances of Fevers; whilst others ex-

plode and condemn it as generally bad, and stigmatize it as a Practice only becoming Midwives and Nurses. The Combatants on both Sides are alike preposterous Systemarians, and are (in my humble Opinion) both much in the Wrong. I think it is pretty plain, that they are each governed more by Whimsy and Caprice, than influenced by Reason: However, I shall leave these Gentlemen to battle it by themselves, and shall proceed to deliver my own Sentiments upon this Article.

I must (in the general) ingenuously confess myself a Votary (though a very modest, dispassionate one) for the Business of Sweating in Fevers, as well as in various other Distempers, in case no Symptoms or Circumstances are present to contra-indicate. Moreover, I apprehend, and indeed cannot help thinking, that when or wheresoever the capillary Arteries and Lymphatics are obstructed in Fevers; and more especially when cutaneous Eruptions appear, sudorific Medicines, if well calculated, and adapted to the Case in question, are the most proper and effectual Method to bring about a happy and speedy Cure. But this is what (perhaps) is not always duly considered and weighed; and I really believe, as Sudorifics are (by some amongst us) promiscuously, irrationally, and injudiciously applied, upon almost all Occasions; so they must often prove pernicious, and sometimes (perhaps) destructive.

It ought to be observed by Practitioners, that the Legend, or Catalogue of Sudorific Medicines, is very copious; and of all the Individuals, perhaps not so much as one is absolutely, but only relatively good, as directed and applied to some one or more particular Cases. This being granted, which I think cannot be denied, it necessarily follows, that amongst the numerous Tribe of sudorific Medicines, many of them must be indifferent, and some, perhaps, really improper and bad, for almost every individual Case.

What

What Circumspection, Judgment, and Care then ought to be used and employed, that they be well chosen, calculated, and adapted to the particular Cases and Circumstances?

I lay it down as undeniable Truth, and Matter of Fact, that all diaphoretic and sudorific Medicines increase the Action, Velocity, or *Momentum Motus*, of the Blood; and consequently, if they are not equally calculated and qualified, either to alter and correct, to break, divide, and comminute; or else to digest and concoct the morbid Matter, they will be so far from curing, or even lessening the Disorder, that they will (on the contrary) augment or increase it. But nevertheless, when Medicines of this Tendency are well constituted, and judiciously applied; they are not only allowable, but are likewise very convenient, proper, and useful: And the Method I shall recommend in this Viw, is as follows; *viz.* Having premised a copious Venesection, and the Emetic before prescribed,

Take Milk of Sulphur, dr. ij. Diaphoretic Antimony, and *Poterrius's* Antihectic, of each scr. iv. Lapis Contrayervæ, dr. j. Russia Castor and Cochineel, of each scr. j. White Sugar-candy, dr. ss. Make a Powder, for six Papers; one of which let be taken every fourth Hour, drinking after, six Spoonfuls of the following Julep:

Take Salt of Wormwood, dr. ij. Juice of Lemons, oz. iiij. Mix, and when done fermenting, add Carduus, and alexiterial Milk-water, of each oz. v. Treacle-water and Syrup of Elder, of each oz. ij. Mix, and give it.

Or otherwise,

Take Æthiops mineral, dr. ss. Diaphoretic Antimony, and white Amber prepared, of each gr. xij. Contrayerva-root, gr. vj. best Castor, gr. iv. Rob of Elder, dr. j ss. Make a Bolus, to be taken every fourth Hour, drinking after, a Glass of the following Apozem:

Take Spanish Scorzonera-root, oz. ij. Roots of common Grass, Asparagus, Sarsaparilla, China, and Liquorice, of each dr. v. Let them be boiled in q. f. of Water, to two Pints, when strain'd; to which add Treacle-water, oz. iij. Syrup of Saffron, oz. ij. Spirits of Lavender, dr. ij. Mix.

Or,

Take Bezoar mineral and *Poterius's* Antihectic, of each scr. iv. Contrayerva-root and Saffron, of each dr. fs. Russia Castor, scr. j. Salt of Amber, gr. xv. White Sugar-candy, dr. fs. Make a Powder, to be divided into six Papers, one of which is to be taken every fourth Hour; drinking after, oz. vj. of the following Apozem, warm:

Take Decoction as for Syrup of Marshmallows, lb. ij. Syrup of Elder, oz. ij. Volatile Sal armoniac, dr. fs. Mix, and give it.

Each of the above Methods is calculated to promote kind, gentle, breathing Sweats, without causing any Violence, or giving any Shock to Nature; and at the same time they are qualified to sheath and obtund the morbid Humours; and consequently to assuage the Violence of their Irritation.

The first Process or Prescription is the softest: The second is the more powerful Alterative; and the third, the strongest Alexipharmic and Sudorific.

The first Method is suited to favour and promote a Crisis, either by Sweat or Urine; but will unite its Forces, and join with Nature, in favouring the particular Secretion she is most inclined to, whatever it may be. The second Process is more particularly calculated to break, divide, and comminute the peccant Humours; to promote an easy Perspiration, and to discharge the Humours so prepared by Secretion. The third and last Method is more particularly and expressly sudorific and alexipharmic: It is calculated to drive the Malignity from the Heart, (as the vulgar Expression is) and may either bring on some cutaneous Eruption, or encourage and promote it, if already begun.

This

This last Method will be more especially applicable and useful, as the Disease draws towards a Crisis; when the Pulse becomes low, and the Spirits weak and languid: For 'tis then that Nature chiefly demands to be reinforced and strengthened by cordial, alexipharmic Medicines.

Blistering is always proper, and to be advised, not only in all sorts of malignant Fevers, but in all Circumstances of them whatever (the *Petechiæ* and bloody Urine apart); though the Ferment and Ebullition of the Blood be ever so luxuriant and raging. Reason, I think, plainly dictates this, and all Experience confirms it: For, first, Blistering either defends the Brain and nervous System, from Assaults of the Disease; or most powerfully and speedily relieves them, when already attack'd by it: They make the strongest Revulsion, and the most powerful Derivation, as well from the Heart, Intestines, and other *Viscera* in general, as from the Brain in particular.

It may seem (perhaps) to Persons who cannot penetrate below the Surfaces of Things, and who only see and judge of them in *prima facie*, that Blisters must be improper, where the Ferment and Ebullition of the Blood run very high, because they manifestly irritate and enhance the Motion and Action of the Fluids, which were abundantly too violent already: But then it is to be considered, that these Actions or Effects of Blisters are but momentary, or at most but of short Duration; whilst (even at that Instant) they are sapping the Foundation of the Disease, by resolving the viscid *Serum*; by breaking, dividing, and comminuting the compacted Salts, or other Substances that constitute the Matter of the Disease; by forcing the obstructed Capillaries and Lymphatics; by opening the Door to a free and legitimate Circulation, and by promoting the Secretion, and an Outlet to the morbid Matter, by the excretory Pores of the Skin: But, though Blisters are avowedly proper and
good

good in all Fevers, and in almost all Circumstances of Fevers; yet are they more particularly and eminently so, for all Affections of the Brain and Nerves, whether they be *Deliriums*, *Coma's*, *Stupors*, *Sopors*, *Subsultus's*, *Tremors*, *Spasms*, or *Convulsions*; and under these Circumstances therefore they ought to be applied in great Plenty; as for Example, to the Head, Neck, Arms, Wrists, Legs, Thighs, &c. To conclude upon this Article; 'tis a Thing beyond Dispute, that great Numbers of Persons have been rescued from impending Fate, by means of Blisters.

What I have urged concerning the collateral and less sensible Properties of Blisters, may very aptly be brought in parallel with what I have advanced concerning Sudorifics, and will sufficiently justify my Theory upon that Article: For it is plain and evident, next to Demonstration, that if Blisters were not endued with the Virtues, Properties, and Powers I have ascribed to them, they must be diametrically opposite to, and grossly bad for, all sorts of Fevers, except those upon the Spirits, and what are commonly called Slow Fevers.

Sometimes higher Cordials, and stronger Alexipharmics, than any of those above-described, may be required; as when the Pulse is extremely low, and the Spirits very languid; when an Eruption appears, but does not advance kindly; when the Heart is much oppress'd, and begirt with dismal Pains; the Stomach affected with Sicknefs, Heaviness, Loathing, &c. In such Cases, and under such Circumstances, I advise the following:

Take Species of Hyacinth, scr. j. Virginian Snake-root, gr. x. Russia Castor, and volatile Salt of Hartshorn, of each gr. vj. Oriental Bezoar, gr. ij. The Egg Electuary, scr. ij. Mithridate. scr. j. Confection of Alkermes, q. s. to make a Bolus, to be taken every fourth Hour, drinking after, a Draught of the following Apozem:

Take

Take Leaves of Scordium, dr. vj. Mint and Baum, of each dr. iij. Flowers of the Marygold, and wild Poppies, of each dr. ij. Spanish Scorzonera-root and Contrayerva, of each dr. ij. Boil them in q. s. of Water to two Pints, when strained; to which add, Syrup of Saffron, oz. ij. Compound Spirit of Lavender, dr. iij. Mix.

If the Patient is very costive, and especially if delirious at the same time; the following Glyster may be injected every Day or two:

Take emollient Decoction, oz. xij. Honey of Herb Mercury, oz. ij. Sal Gem, dr. ij. Mix for a Glyster.

If attended with a Looseness, provided the Fever abates, and the natural Forces are not much weakened thereby, it ought to be indulged.

A Paregoric may be given at Night, as Occasion shall require. The Circumstances or Symptoms most coercive to it, are continued Restlessness, attended with a *Delirium*, or *Coma vigil*. In such Case I advise the following; viz.

Take Cowslip-water, or wild Poppy-water, oz. iij. Syrup of Diacodium, oz. j. Spirits of Nitre dulcified, scr. ij. Liquid Laudanum, gtt. viij. Mix for a Draught.

Plaisters to the Soles of the Feet, of Cephalic Plaister, with double *Euphorbium*; live Pigeons, cut open, and applied immediately, whilst hot, and such-like Things, are what almost every one's Knowledge will suggest to them, where those Things are required; as in violent Distemperatures of the Brain, &c.

For common Drink, a small Sack-whey is proper; or a Tea made of Marygold Flowers, and true Maidenhair.

Purging may be requisite in some Circumstances of this Disease, especially when the Brain, Stomach, and Intestines are very much affected and oppressed, and when the morbid Matter tends towards Concoction.

Amongst

Amongst purging Medicines (when such shall appear necessary) I prefer the following:

Take Pulp of Cassia, dr. j. Rhubarb, dr. ss. Calomel prepared, gr. x. Diagrydium, gr. v. Oil of Cloves, gtt. v. Make a Bolus, to be taken at Pleasure.

The same repeated three or four times (at due Distances from each other) after the Turn of the Fever, would be very proper to carry off the Dregs or Recrement of the febrile Matter.

The Æthiops mineral, in the second Method directed, may perhaps seem a new Sort of Medicine in this Kind of Fever: But however, I have experienc'd it in several Instances; and my Experience of it has abundantly justified and confirmed my Opinion of its Usefulness.

CHAP. V.

Of the Miliary, and Spotted FEVERS.

THESE Fevers are yet of the malignant Kind, and might very justly have been comprehended in that Chapter: But as they have their own proper and distinct Appearances; so they have obtained particular Denominations.

The Miliary Fever (which is so distinguish'd from the Resemblance its Pustles bear to the *Semen Mili*) is the mildest of the malignant Class; but the Spotted expresses the most exalted Malignity and Acrimony of Humours, of any amongst this Tribe of Fevers, or on this Side the pestilential.

The Miliary Fever is seldom or never infectious, though sometimes epidemical; the Spotted Fever is frequently epidemical; and 'tis generally thought (though I will not presume to say with what Justice)

to be contagious. When Physicians, Nurses, and others who attend the Sick of this Disease, escape catching it, they have good Reason (one would think) to conclude it is not infectious. And though some few in the same House, or who frequent the Chamber of the Sick, are seized with the same Disease, 'tis not therefore to be said that they caught the Fever; but rather that they fell ill of the same Fever, from the same common Cause; *viz.* a polluted, vitiated Air or Soil, and a Habit of Body disposed for Infection; or disposed to receive and improve their noxious, poisonous Impregnations: Nor can it be absolutely decreed, (on the other hand) that the supposed Persons did not catch or receive the Disease from the Sick, though others, equally conversant with them, did not; because 'tis well known that all Persons are not equally susceptible to receive the same Infection, under the same Circumstances and Situation.

These two Species of Fevers, with their respective Appearances, are so well known to every Person conversant in the Practice of Medicine, that it is needless to describe their Symptoms here.

I shall first speak of the Miliary Fever: For the Causes of this Fever, whether the antecedent, or the mediate, (in which its Essence is comprehended) or the immediate, I shall refer to what has been already said, concerning common Malignants.

The grand Intention of Cure in this Fever is, to move the morbid Matter from the Centre to the Circumference of the Body; or (in other Words) to encourage and promote the cutaneous Eruption, and expel the Humours that way: But then, this should always be endeavour'd and accomplish'd by such Methods and Means as are most easy and amicable to the Constitution: In this View, such Medicines as are directed to promote the Expulsion and Discharge of the morbid Matter by the Glands of the Skin, (whether in the way of Sweats, or Eruptions) should likewise

likewise be endued (at the same time) with a Property and Power, either to alter and correct, attenuate and resolve, digest and concoct, or to divide and comminute the same morbid Humours: For otherwise, as all Medicines given with Design to promote these Discharges, will necessarily increase the Action and *Impetus* of the Fluids, upon the conical Sides of the arterial Vessels; so they will increase every Symptom of the Fever, by augmenting the *Nisus*, or vibrative Force of the Vessels; except (as above-observed) they are equally calculated to alter and meliorate the morbid Humours at the same time. To this End (Bleeding being premised, and an Emetic, if Symptoms indicate it) Cordials, with the warmer Diaphoretics or Sudorifics, are necessary; and to these should be joined such Things as either sheath and obtund, or attenuate and resolve, the morbid Humours. The necessary Methods being premised, I recommend the following; *viz.*

Take the purple Powder, and diaphoretic Antimony, of each scr. iv. Saffron and Contrayerva-root, of each dr. fs. Russia Castor, gr. xv. White Sugar-candy, scr. j. Make a Powder, to be divided into six Papers; one of which to be taken every four Hours, drinking after, a Glass of the following Decoction, warm:

Take Raisins, and Spanish Scorzonera-root, of each oz. ij. Roots of Marshmallow and Asparagus, of each oz. j. French Barley, m. j. Let them be boiled in q. f. of Water to lb. ij. to which add Syrup of Elder, oz. ij. Plague-water, oz. iv. Mix, and give it.

Or otherwise,

Take Æthiops mineral, scr. j. Bezoar mineral, gr. xij. Saffron and Contrayerva-root, of each gr. vj. Russia Castor, gr. iv. The Egg Electuary, scr. j. Syrup of Chermes, q. f. to make a Bolus, to be taken every fourth Hour; drinking after, six Spoonfuls of the following Julep:

Take alexiterial Milk-water, oz. xij. Treacle-water and Plague-water, of each oz. ij. Syrup of Marshmallows, oz. j fs. Mix for a Julep.

Blisters

Blisters are good here, to promote the Separation, and forward the Expulsion, of the morbid Matter: But these will be more especially necessary, if attended with *Deliriums*, *Coma's*, Anguish at Heart, &c.

If the Patient be over-costive, an emollient Glyster may be injected every other Day, or as Occasion shall require, to keep the Body soluble, and to prevent or take off *Deliriums*, and other Affections of the Brain. But if (on the other hand) a *Diarrhæa* happens, it should not be indulged longer than the Space of one natural Day; except accompanied with a manifest Abatement of the Fever, and a Diminution of all the Symptoms. To curb and restrain a *Diarrhæa*, I advise the following:

Take Barley Cinnamon-water, oz. iij. Syrup of Diacodium, oz. j. Diafcordium without Honey, dr. j. Liquid Laudanum, gtt. viij. Make a Draught, to be taken at Bed-time, and to be repeated as Occasion shall require.

I promise myself, that some one or other of these Methods, judiciously applied, as the Symptoms and Circumstances shall require, will very seldom fail of effecting a Cure: But however, if the Pulse should become very weak and languid, the Brain seem depress'd, and the Spirits faint, I prefer the following:

Take Mithridate, Egg Electuary, of each scr. j. Contrayerva-root, Saffron, and volatile Salt of Hartshorn, of each gr. vj. Russia Castor, gr. iv. Syrup of Chermes, q. s. to make a Bolus, to be taken every third Hour; drinking after, four Spoonfuls of the last-mention'd Julep.

Of the Spotted FEVER.

THIS Fever (as 'tis well known) is so called and distinguish'd, from the dark-red or purple Spots which appear upon the Surface of the Body.

The concomitant Symptoms, indeed, are always numerous and direful enough: But however, the more
multiform

multiform and severe these are, the more dangerous always, and more difficult the Case.

The Physician's utmost Address, Care, and Attention, are always required in this Sort of Fever; but more especially where the Number and Degree of the Symptoms express the highest Malignity.

The dark-red or purple Spots alone, are sufficient to testify a very great Acrimony of Humours, and a very exalted Ferment of the Blood; even though the other Symptoms (which are rarely wanting to confirm it) were out of the question.

The whole Legend of Symptoms incident to malignant Fevers in general, do sometimes, and that not rarely, happen to this particular Species of them: Hence it should seem, that the Intentions of Cure, and the Instruments or Medicines wherewith to execute them, will be in a great measure the same as described in that Chapter; to which, therefore, I refer for the general Methods of Cure in this Fever. But whereas in this Fever there appears a more exalted Acrimony of Humours, and a more exorbitant Ferment and Ebullition, than in common Malignants; so we must, on the one hand, have recourse to more powerful Obtundents, to blunt and prevent their violent Irritation; and (on the other) to such Things as may condense and repress the exorbitant, preternatural Ferments, &c.

Furthermore, tho' the Intentions of Cure in this Sort of Fever bear so near an Analogy with those described in common Malignants; yet it may be at least a pardonable Tautology, if I recite them again here. The Intentions, then, are, (in general Terms) to prepare and eliminate the morbid Matter; that is, first, either to alter and correct, attenuate and resolve, break, divide, and comminute; or digest, concoct, and maturate, and afterwards to expel and discharge them. But whilst we are prosecuting these necessary Views and Designs, we must not be unattentive to the
State

State of the Fever, which we must endeavour to keep within its due Bounds, by interspersing such Medicines as may serve, 1st, To check and repress the inordinate Ferment and Ebullition of the Blood; and, 2^{dly}, by sheathing and obtunding the acriminous Humours, lessen their intestine Irritation, and the Violence of their Action upon the Solids: And by a judicious Pursuit of these Views, all Affections of the Brain, and other vital Parts, will be in a proportional Degree either prevented, or lessened. And thus a very salutary *Caveat* may be enter'd against the more grievous and dangerous Symptoms.

It may appear, perhaps, upon a superficial Inquiry, that Blisters applied outwardly, and warm diaphoretic or sudorific Medicines given inwardly, will rather increase than lessen the Ebullition of the Blood, and consequently enhance every Symptom of the Fever: But if we only make a fair and impartial Appeal to our Observations on the Cure of this Fever, we shall certainly find, that such or such-like Methods, interspers'd with suitable Obtundents, and assisted plentifully with Diluents, have proved the most successful.

'Tis undeniable, indeed, that the first Action or Effect of Blisters is stimulating; and that of warm Sudorifics irritating: But then, these Qualities or Properties (which would seem diametrically opposite to the plain Business and Design of curing a Fever) may, and indeed (as I have already observ'd) certainly ought to be associated with other Virtues, Powers, and Properties, that make ample Amends for it.

All Experience testifies, that Blisters make a powerful Revulsion and Derivation from the Brain, and other noble Parts, when oppress'd, or otherwise affected in Fevers. And besides these Advantages, it is pretty plain to me, (from the Dictates of Experience I mean, as well as Reason) that they act with

great Force and Efficacy, in attenuating, resolving, dividing, and comminuting the morbid Humours ; so that they may reasonably be supposed to profit upon more Accounts than barely Revulsion and Derivation.

I shall hereafter have further Occasion to speak of them ; particularly to set forth their singular and admirable Use, in promoting the Separation of the morbid Matter from the Blood, in the Case of the Small-pox ; and bringing on the Eruption, even when it had proved unattainable by all other Means whatever. And hence it appears, that they most powerfully break and destroy the Cohesion, or intimate Union, of the morbid Matter with the Blood.

It must be confess'd, however, that I have seen and well remark'd numerous Instances, where Blisters, (to their great Disparagement, some may say) whilst operating, have suspended a Sediment in the Urine of a febrile Patient ; and from a turbid State have render'd it clear and amber-colour'd : But then, it has as certainly been followed by a much more notable and laudable Separation and Sediment, in the Space of twelve, or at most twenty-four Hours after they were taken off.

The Reason or Cause of this temporary Suspension of the Separation and Sediment in Urine, under the immediate Operation of Blisters, appears, in my Opinion, very plain, and I presume is as follows ; *viz.* Blisters, by their violent *Stimulus*, greatly enhance and augment the Action and Velocity of the Blood ; and at the same time, by some other peculiar Virtues and Properties inherent in them, (which by the way are not too occult and mystical to admit of accounting for) they attenuate and resolve all the constituent Parts of the complex Fluid, as well the heterogeneous as the homogeneous. What then will be the necessary Consequence of these primary Effects of Blisters ? Why, the Blood will resorb and reclaim the morbid Humours,

Humours, which had begun to separate and detach themselves from it; and they will be so intimately mixed and blended together by this increased Action and Collision, as to appear one uniform, transparent Fluid, *pro tempore*: But so soon as this *Stimulus* is removed, and the borrowed Action of the Blood recedes again; the morbid Humours detach themselves from it afresh, and shew themselves in the Urine, in a more broken, maturated, and concocted State. But besides this, another Reason may yet be assigned for this temporary Suspension of the Sediment in the Urine; that is, Blisters (by their *Stimulus*) may contract and constipate the Glands of the Kidneys to so great a Degree, that they can admit nothing but the clear *Lotium* or Urine to pass through them. But, however, the first Cause assigned is the true one, as I judge.

All diaphoretic, sudorific, and alexipharmac Medicines irritate (as I have already observ'd) both Solids and Fluids; and consequently would greatly augment the Fever, if they were not endued with some other Virtues and Properties which counterbalance *that*; or at least, if they are not accompanied with such Diluents and Obtundents as may sheath and take off from the Exertion and Perception of it. But when Medicines of this Tendency are well calculated and adapted to the Nature of the Disease, or rather of the morbid Humours that subtend it, they will necessarily either alter and correct, attenuate and resolve, divide and comminute; or digest, maturate, and concoct, the peccant Humours at the same time; so that the Cure of the Disease (and not the Disease itself) may be very happily advanced by them; or at least, it very often is so.

It is unnecessary to attempt defining the Nature of each Symptom incident to this Fever, and to explain by what Mechanism they are produced, as I have been pretty copious upon that Head, in the Chapter

of common Malignants. Therefore I shall proceed to superadd something concerning the Methods of Cure, to be used in this particular Fever.

First of all, take away a good Quantity of Blood, viz. oz. xv. or xx. according to the Age, Strength and Temperament of the Patient. And two or three Hours after Bleeding, the following *Emetic*:

Take Ipecacuana powder'd, gr. xxv. Carduus-water, dr. x. Syrup of Violets, dr. v. Make a Potion.

Take Milk-water, oz. iij. Treacle and Plague-water, of each dr. iij. Syrup of Diacodium, oz. j. Diafcordium without Honey, scr. ij. Make a Draught; to be taken when the Operation of the Vomit is ended.

Take Æthiops Mineral, dr. fs. *Poterius's* Antihectic, gr. xv. Contrayerva-root, gr. vj. Russia Castor and Camphor, of each gr. iij. Mithridate, scr. j. Confection of Alkermes, q. s. to make a Bolus: To be taken every fourth Hour, drinking after, six Spoonfuls of the following Julep:

Take Salt of Wormwood, dr. ij. old Rhenish-wine, oz. xvj. Treacle-water, oz. iv. Syrup of Elder, and of the Five opening Roots, of each oz. j fs. Mix for a Julep.

Take Spanish Scorzonera-root, oz. ij. of the Five opening Roots, of each dr. v. French Barley, m. j. Let them be boil'd in q. s. of Water to lb. ij. when strain'd, for the following Use.

Take white Poppy-seeds, oz. j. the Four greater cold Seeds, of each dr. vj. sweet Almonds skinn'd, N^o. xxx. Let them be beat together well, and pour upon them, by little and little, of the fore-written Decoction, to make an Emulsion; to every Pint of which add Syrup of Marshmallows, oz. j. Spirit of Nitre dulcified, dr. j fs. Mix, and drink plentifully of it for common Drink.

Besides this Emulsion, the Patient may drink now-and-then warm Sack-whey, in which some dry'd Marygold-flowers were boil'd. Or a medicated Sack-whey may be made, in manner following; which will be at once a very proper Diluent, and a mild Sudorific:

Take

Take Spanish Scorzonera-root, oz. j fs. Sarsaparilla and China, of each dr. vj. Marygold-flowers dry'd, dr. iij. Let them be boil'd in Milk and Water, of each lb. j fs. for a Moment; then add Sack, q. f. and strain for Use.

If any Gentleman of the Faculty should be so unaccountably prejudic'd and prepossess'd against the Use of warm, sudorific Medicines, in these Fevers, as blindly and absolutely to reject the Methods above-described, I would give some Indulgence to an invincible Superstition in that Case (provided the ill Habit does not result more from a Spirit of Obstinacy and Opposition, than real Opinion); and therefore recommend the following Method to their Approbation and Practice:

Take Cream of Tartar, scr. j. Lac Sulphur, white Amber prepared, and *Poterius's* Antihectic, of each gr. xij. Camphor, gr. iij. Make a Bolus, with q. f. of Conserve of Wood-sorrel: To be taken every fourth Hour, drinking after, a Draught of the fore-written Emulsion.

Blisters ought to be applied in great Plenty, during the Use of such a Process, for fear of condensing and fixing the Humours over-much. And, upon that Supposition, two Ounces of Tamarinds may be boil'd in the Decoction for the Emulsion.

I must confess, (for my own part) I never experienc'd such a Method, in Cases of this Nature: Nor should I have the Courage to put it in Practice, except convinced of its Usefulness, Safety, and good Success, upon very good Authority; that is, the Reports of Physicians of good Credit, who had already made frequent Trials of it, upon the like Occasions. The Method, however, may be supported by some Sort of Arguments. And since I have mention'd it, it may be expected I should produce what I have to offer in its Vindication: Which take as follows. The *Cream of Tartar*, and *Conserve of Wood-sorrel*, serve to cool and condense; and by that means may repress the

violent Ebullition of the Blood, and lessen the Action and *Impetus* of the morbid Humours upon the Solids: The *Lac Sulphur.* and *Antihæc. Poterii*, to alter and correct, or to resolve, divide, and comminute: The *Amber* to absorb, and the *Camphor* to obtund and sheath. And, to this last Purpose, (as well as the first) the *Emulsion* will assist a good deal.

This Method might be of great Use, perhaps, in some Circumstances of the confluent *Small-Pox*; especially where the *Petechiæ*, or *Maculæ nigræ*, and bloody Urine, appear. Nor, indeed, do I absolutely give up the Point, concerning its Use and Benefit in the Cure of this Fever; though I give the Preference to the opposite Method.

Camphor was brought into play (as applicable in these, and such-like Cases) of late Years, and is now very much in Vogue. It is certainly a very nauseous and inflaming Medicine; but then it is a powerful Obtundent and Sudorific. However, for the Use or Disuse of it upon these Occasions, I must chiefly appeal to, and rely upon, the Experience and Reports of others.

I have found Juleps of *Salt of Wormwood*, either with Juice of Lemons, or *Rhenish* Wine, to be of great Use and Benefit in this Sort of Fever; and, indeed, in many others. The Salt is, by these Means or Mixtures, neutraliz'd. It acts as a Sudorific, in a very mild, benign manner, without that irritating Quality which is peculiar to most other Sudorifics. Besides that, it is of great Use in another Sense: And this is, by breaking or dissolving the Cohesion and Union of the morbid Matter with the Blood. This same is a cardinal Point: And it may always be depended on, whenever that End is duly obtain'd, the Patient stands a fair Chance to escape.

C H A P. VI.

Of the PLAGUE, or Pestilential Fevers.

THE *Plague, or pestilential Fever*, (on account of the swift, wide, and almost irresistible Destruction it carries with it) impresses greater Terror on the human Mind, than all the rest of the Diseases to which we are incident. It is recogniz'd, in our most excellent and holy Litany, as one of the four capital Evils to which Mankind is subject. Since then it is, in its present apparent Nature, so dreadful and fatal; and that all Climates, Countries, and States, are (in a comparative Sense) liable to be visited with it; I think it highly behoves Physicians (not only one or two of them, but the whole Faculty in general) to employ their utmost Attention and Endeavours, in order to find out, digest, and compile a Set of Remedies, or certain *Formulæ*, which may (in some measure at least) be adequate to the Virulency and Fury of this Disease. And how great a Consolation and Happiness would it be to Mankind, (especially to the Inhabitants of such Countries as are most frequently visited with it) could we discover an Antidote to this destroying Poison! By an *Antidote* I would not be suppos'd to mean an absolute and infallible Cure (no! Physicians have not yet arrived to that Point, even in Fevers, which are much milder in their Nature); but only some Means and Methods, that may more generally and probably avail, than any of those Methods and Medicines that are hitherto known, or at least publish'd and practis'd.

It may (perhaps) be a Matter of Question, whether the Fatality of this Disease, and the almost insuperable Difficulty Physicians meet with in their Attempts to cure it, result so much from the real Obsti-

nacy and Invincibility of the Disease itself, as from the Weakness and Inefficacy of the Remedies generally made use of, and the ill Judgment employ'd in the directing of them. If I am right in my Conjectures, or rather in the Doubts I form upon this Head, we may modestly hope (in time) to make some more useful and beneficial Discoveries. But however it may be as to that, I think we cannot well under-do the Labours of those who have gone before us; whether we respect their speculative Systems, or practical Methods they have laid down, for the Cure of this Disease.

I shall not concern myself in the least in the Dispute, whether this Disease is infectious and contagious, or not; nor (if so) by what Means, and through what *Medium*, it is communicated from one Person to another; as, for Example, whether the poisonous Miasms, or *Effluvia*, are received into the Lungs by the Act of Inspiration, or are immediately transmitted to the Blood through the Pores of the Skin: Nor yet shall I give myself the Trouble to inquire, whether it is carried and conveyed from one Place or Country to another very remote from it, in Goods, Merchandize, &c. No; these Things would be foreign to my Design: And therefore I refer such as want to be well-inform'd in these Particulars, to the many Systems, and controversial Pieces, that have been publish'd upon that Head, where (perhaps) they may happen to be fully satisfied. Leaving therefore such unnecessary Inquiries to those who have more Curiosity and Leisure, I shall proceed to deliver my Sentiments concerning the true Causes, Nature and Essence of the *Plague*, and the Methods which (I judge) will be most useful and effectual in its Cure.

The *Plague* then (with respect to its Nature) is a Fever, which is abundantly more complex, virulent, and fatal, than any other Kind of Fever whatever.

A true

A true Plague, or pestilential Fever, has always its own peculiar Characteristics, by which it is distinguished from other Fevers, and certainly known to be such: These are *Buboes*, Carbuncles, Swellings in the *Parotides*, &c. But (these Symptoms apart) the Intensity of the Fever, with other concomitant Symptoms, that specify the highest Malignity, and the hasty Period it generally puts to the Life of the Sick, are often sufficient to declare its *Genus*.

Let us suppose (for Example) an epidemical Fever to break out in any City or Country, and to rage furiously; perhaps these singular Marks, or Characteristics of the Plague, shall only appear in one half, or one quarter Part, of the Subjects that are seized with it. But nevertheless, seeing many other Persons are seized with a Fever (at a time, and in the midst of so general a Calamity) resembling the Plague, in all its other Symptoms, as well as in the hasty Period it puts to the Lives of the Diseas'd, viz. in the Space of one, two, three, or four Days, at most, I believe no Physician (in that Case) will hesitate to pronounce, that such Persons died of the Plague.

Buboes, Carbuncles, and other external Swellings, (where-ever they appear) are certain Tokens of Nature's kind Efforts. These are infallibly *critical*, though not always a *Crisis*. On the other hand, many Persons are destroyed by the Violence of the Distemper, and are hurried off, before Nature has had time to manifest such her kind Intentions. In some, again, (who, perhaps, may stem the Torrent a little longer) the whole Constitution shall be in such a Flame and Confusion, that 'tis out of the Power of Nature and Art to bring about a Separation, and consequently to exhibit those Tokens (though, God knows, they are very precarious ones) of a happy Issue to the Disease.

The first and most remote Cause or Origin of this Disease must certainly exist either in the Air or Soil:
But,

But, most probably, in the former. *Hippocrates* was of Opinion, that no Condition or State of the Air could produce a Plague or Pestilence, but the hot and moist: And these (as I take it) constitute what we call the *fultry*. Some Moderns (after *Hippocrates's* Example) fall into the same Opinion, and throw Southerly Winds into the Bargain: But surely such a State of Air, if stagnant, and void of Motion, would be more apt to cause Plagues, and other epidemical Diseases, than if the same was put in Motion by any Wind whatever. However, I cannot rest perfectly satisfied in this Definition; and therefore must appeal further, for some other Cause, to assist, at least.

An Air that is capable of producing the Plague, (whatsoever it may be as to its Temperature) must certainly be impregnated, or imbrued, with some corrupt, putrid, or other noxious and poisonous *Effluvia*: And it must necessarily derive these, either from the Soil and Waters originally; or else from the Stench of corrupted Cadavers, or of any other dead Bodies, whether of Animals or Insects.

The Air may, undoubtedly, receive very noxious and pernicious Impregnations from the Earth and Waters; for those Elements are (in a comparative Degree) susceptible of Corruptions, Putrefactions, and Distemperatures, as well as animal Bodies: Which latter are composed and formed (only of more abstracted Parts) of themselves; viz. of the mention'd Elements.

'Tis notorious, that Cattle are sometimes affected with an epidemical Disease, call'd the *Murrain*, (a Disease equal to a Plague amongst the human Species) which sweeps off great Numbers of them: And this must certainly result from the Soil they feed upon, or the Herbage that immediately proceeds from it; and, consequently, must partake of its ill Qualities.

But

But this Argument, or Definition, may (perhaps) be liable to Difficulties and Objections. It may be ask'd, Why are not all the Cattle, that feed on the same Pasture, or in the same District, seiz'd in the same Manner, and attended with the same Fate? Whereas, 'tis evident, some escape the Disease, whilst the major Part of the Herd are languishing and dying round about them. To this it may be answer'd, That there is a Difference (perhaps) in the Constitutions of Cattle, as well as in those of the human Species; and, consequently, that the *Fomes*, or infectious Matter, operates in those where it meets with a suitable *Pabulum*, and in others not. But I have yet another Argument to offer against any such Objection: *b. e.* Supposing the Earth to have ingender'd corrupt, putrid, or other noxious and poisonous Qualities, which it imparts to the Herbage growing upon its Surface, yet these noxious Humours may be unequally and partially dispensed; and, consequently, this Spot of Grass may be salubrious; another, contiguous to it, poisonous. And hence, again, 'tis plain, that the Cattle will fare well or ill, according to the Spot or Spots of Soil that they chuse to feed upon. But the Reasonableness and *Vraisemblance* of this Supposition will be further corroborated, by a Thing somewhat parallel to it; which I shall just now relate.

Some Gentlemen, of good Discernment, and known Veracity, (who have passed several Years in *Egypt* and *Turkey*, especially at *Grand Cairo*, *Alexandria*, *Smyrna*, and other Places, which the Plague most frequently visits) have communicated to me the Circumstances and Accidents, that either precede or accompany the Births of Plagues in those Parts.

These Gentlemen assure me, that, according to their own Observation, as well as the common Testimony and Report of the Natives of the said Places, the Plague is always preceded or accompanied with these Circumstances; *viz.* That on or about a certain
Time

Time of the Year (the Month of *February*, for Example) the Wind generally blows from the South-east, or South-south-east: That these Winds passing over, and sweeping the wide-extended Sands of *Arabia Deserta*, bring excessive Heats upon the Country, and Places to Leeward of them: And, moreover, that sometimes they bring with them (from the Sands of *Arabia*) such Clouds of Flies, Locusts, and other Vermin, as almost darken the Sky: That, most commonly, these Flies, &c. being (sooner or later) overcome by the excessive Heat, fall down dead, in such Heaps as are scarce credible: That these prodigious Heaps of dead Flies, and other Vermin, soon corrupting and putrefying, emit a most terrible and noxious Stench. And lastly, it is supposed, or rather concluded, that the Stench arising from these corrupted Insects, is the efficient Cause of the Plague.

This Conjecture, or rather Assertion, has a good deal of Probability on its Side. But the Truth, or Reasonableness of it will be yet further corroborated and manifested by the following Observations; *viz.*

I am told, and assured, that the Plague never (or, at most, but very seldom) happens, without the above-mention'd Circumstance preceding it. And I am further inform'd, that the Plague always diffuses itself, and rages most violently, where those Vermin fall in greatest Abundance; and in such Parts of Cities and Countries, as lie immediately to the Leeward of them. Nay, I am assured, that some Parts or Districts of the same City shall be, in a comparative Sense, free from the Plague, whilst it rages furiously in others.

From what has been said I think it appears plain, that the Stench, or corrupt *Effluvia*, that arise from these Heaps of putrefied Vermin, are the true, genuine *Fomes*, or Parents, of the Plague: That these act upon and infect the circumambient People, who
lie

lie within the Sphere of their Activity: And moreover, that such Persons as lie to Leeward of them, though at a considerable Distance from them, are, notwithstanding, liable to the Infection; because the putrid Spray, or *Effluvia*, are wafted off, and carried down upon them, in the common Course of the Wind. Some few of the Gentlemen from whom I borrow the above Account, (though the major Part of them are of the opposite Opinion) do not incline to allow, that the Plague (as it exists in those Parts) is so remarkably contagious, and communicative from one Person to another, as it appears, or is generally thought to be, in other Parts of the World; but they rather think and maintain, that such Persons as are seized with it (generally speaking) derive it from the same common and general Cause.

This Account, concerning the Source or Origin of the Plagues that happen in *Egypt, Turkey, &c.* is a Digression (indeed) that I should scarce have indulg'd myself in; only as it may serve, in some measure, to determine in the Controversies which subsisted some Years ago upon the same Subject. And, besides, it may be of some Use, in forming our Notions concerning the true Source or Origin of Plagues, that happen in other Countries and Climates.

The *Causa media*, or mediate Cause of this Disease, consists in certain venine Particles; which (by some Means or other) having insinuated themselves into our Blood, do contaminate and pervert the whole Mass, and so finally stir up a Fever. These venomous Particles then constitute the true *Fomes*, and real Essence, of the Disease; and the *Genus* of the Fever is generally specified by its concomitant Symptoms, which are proportional to the Virulency of its Cause. As to the *Causa proxima*, or immediate Cause, it consists in the Disposition, Action and Exertion of the morbid Humours.

I am almost at a loss by what Name to distinguish the Change thus wrought upon the animal Fluids, by the Intromission of venine Particles from without. Shall we call it Corruption, Putrefaction, or Contamination? I believe Contamination will be the fittest Distinction, and will come nearest the Truth. And, I presume, a Person's Blood thus contaminated is, in some measure, assimilated to the Particles by which it is contaminated, and changed into their own specific Nature. This is, undoubtedly, the State of the Case here, as well as in some other Fevers, which are caused by a malignant Vapour or Miasm, that (could it be collected and condens'd) would be but of very inconsiderable Bulk, perhaps.

The morbid Humours, that constitute and subtend this Kind of Fever, are inconceivably virulent in their Nature: They frequently act in a manner like Caustics; especially when critically determin'd and protruded on the *Viscera*, Intestines, and the like, where they produce sudden Gangreens, Mortifications, and Death. But, besides these, the external, manifest Symptoms and Effects they produce, sufficiently testify concerning their caustic Nature. For, how astonishing is it, to see a youthful, robust Constitution, demolish'd, by the mere Force of a Fever, without the Intervention of any accidental Symptom, (such as a Convulsion, Apoplexy, or the like) and all in the Space of twenty-four Hours! And yet this is what frequently happens in the Plague.

As concerning the specific Nature of the Humours that cause and subtend this Disease, it would be a very difficult Task to come to any positive Determination about them. However, I must confess, I am much more inclin'd to chime in with the old mystical Notion, That Salts are the principal, if not the sole Tragedians here, rather than in any other Fever or Disease whatever. And further, I apprehend and judge, that the supposed Salts are retaining to the alkaline

kaline Sort. Thus much of the Causes, Nature and Effence of this Disease. I shall now proceed to consider its Intentions, and Methods of Cure.

The general Intentions of Cure are reducible to two only, *viz.* first, to correct and subdue the morbid Matter; and, secondly, to expel and discharge it. But, besides these, many particular Indications may arise, according to the Variety and Diversity of Symptoms that present: And those general Intentions should always be preceded by some suitable and proper Evacuations, that the Blood may have more Scope and Room to play or move in.

This Disease no sooner seizes a Person, but (generally speaking, at least) it hurries on a long Tribe of dismal Symptoms: Therefore no Time ought to be lost; but to the Business of curing immediately. And, first, I advise Bleeding, to the Quantity of fifteen or twenty Ounces, or more, according to the Degree of Age, Strength, and Temperament, of the Person diseas'd. Next, I prescribe such Things as may dilute, and at the same time powerfully obtund and sheath, the acrimonious Humours, and take off or lessen the Exertion and Perception of their irritating Powers and Qualities: To which End,

Take white Poppy-seeds, oz. j. the Four greater cold Seeds, of each dr. vj. sweet Almonds skinn'd, N^o. xxx. white Sugar-candy, oz. ij. Let them be beat well; and add, by little and little, Decoction as for the Syrup of Marshmallows, lb. ij. Make an Emulsion; to which add Syrup of wild Poppies, oz. ij. Mix, and drink oz. vj. every two Hours, a little warm'd.

The Sick may drink, betwixt whiles, a small Sack-whey, made in manner following:

Take French Barley, oz. j. Roots of Grass, and Asparagus, of each dr. vj. Leaves of Colts-foot, and Maiden-hair, of each m. j. Let them be boil'd for a Quarter of an Hour in Milk and Water, of each lb. ij. then add Canary-wine, q. s. and strain: Of which drink plentifully, warm.

These

These two will be sufficient to answer the Purposes of diluting and sheathing the acrimonious Humours, which will necessarily prevent or abate many dismal Symptoms. Here we turn our Eyes on the Root of the Disease, and consider what may be most proper to correct and expel the morbid Matter.

The Disease in question has not (God be praised!) appeared in this our Land for the Space of seventy Years past; and, consequently, no Physician now living amongst us can reasonably be supposed to have any Knowledge of it, more than he gathers from the History of Diseases, and the Tradition of Men; at least, except he has been in some foreign Parts at a Time when they were visited with it, and (perhaps) concern'd himself in the Practice of it. Upon this Account I have examined, cursorily, the Practice, as well of Ancients as Moderns, upon it; which, I must confess, appear very unsatisfactory to me, and are, in my Opinion, very weak and insufficient. For this Reason I shall equally reject and pass over their Methods of Cure, as well as the various Definitions they have given of the Disease; and shall hasten to deliver my own Sentiments upon the Matter.

We have great Reason to fear, that the ordinary Methods of treating common Malignants, (such as Blisters, the *Testacea*, Diaphoretics, Sudorifics, and Alexipharmacs) notwithstanding they are generally attended with Success in those Cases, will scarcely avail in this.

The celebrated and justly renown'd *Sydenham* (our Countryman) inculcates, and strenuously recommends, copious Bleeding in the Beginning of the Disease; in case no Tumour, or other Symptom, appear upon the Superficies of the Body, to interdict or forbid it.

This faithful and accurate Historian tells us of a Surgeon, who, during the Time that the Plague raged in *Somersetshire*, cured great Numbers of this Disease (and even all he took in Hand, to a Man) by Bleeding only.

only. He bled his Patients at the first Onset of the Disease, and before there was any Sign or Appearance of a Tumour, till they were scarce able to stand upon their Legs. Our Historian's Expression is thus: *Sanguinem, ingenti copiâ, detraxit, donec pedibus deficere inciperent, &c.* Sydenham practis'd copious and repeated Bleedings himself, during the Plague at London, till the Clamours of the Populace obliged him to moderate it. However, he nevertheless continued to order copious Bleeding once, at the Beginning of the Disease, no Tumour appearing: And he remarks, that, after Bleeding, a *Diaphoresis* was brought on with Ease, Expedition, and Success; which it was next to impossible to raise by the strongest Sudorifics, before Bleeding had been celebrated. This is a literal Justification of the Arguments I have brought heretofore, to prove the Necessity and Usefulness of Bleeding in many other Cases, especially in malignant Fevers.

Our said Author explodes the Use of the hotter Sudorifics, except where Bleeding had been premised; and, with great Reason and Validity, obviates their ill Effects, and bad Consequences.

Sydenham was inclin'd to think, that there might lie conceal'd, in the Womb of Nature, some peculiar Specific, or Antidote, for this pestiferous Venom; but that it could only be discover'd, and brought to Light, by the Force of mechanical Reason. These are his Words: *Mibi autem verisimile est peculiare pestis remedium, propriumque ipsius pernicipi alexiterium, adhuc in Naturæ sinu abditum delitescere, nec eandem nisi ratione quâdam mechanicâ tolli posse.*

Sydenham supposes, that the true Essence of this Disease consists in an Inflammation of the more spirituous Particles of the Blood. There, indeed, I cannot altogether agree with him: Though, on the other hand, I am extremely well pleased with his Way of explaining by what Mechanism the hotter Sudorifics (injudi-

ciously and unseasonably applied, in pestiferous Cases) produce those fatal Effects he had often observed from them; particularly the purple and black Spots. He supposes, that the exorbitant Heat and Ebullition, which were necessarily stirr'd up in the Blood, by the Mixture, Action and Irritation of the morbid Humours, being increas'd and aggravated by the unseasonable Application of the hotter Cordials and Sudorifics, its more subtil Parts are thrown into a greater Fury by this additional Heat; and the fibrous Parts of the Blood being greatly stretch'd, beyond their natural Texture, are intirely broken, and the whole *Crafsis* of the Blood dissolved and destroyed. The Texture or *Crafsis* of the Blood being thus broken and destroyed, 'tis easy to discern, that it will rush off at the Extremities of the Arteries, and, by extravasating in the Skin, produce those Spots which are accounted the certain *Prænuncia* of Death. The Author's own Words are these: *Aut, quod tristioris adhuc ominis est, vanâ spe aliquantisper lactatus, tandem, pro sudoribus, exanthemata pestilentialia elicies. Cùm enim præcipua hujusce mali labes in spirituosiori massæ sanguineæ parte resideat, unde crassiorum particularum exagitatio, nonnihil languidior quàm in aliis inflammationibus plerumque existat; tenuior illa portio, novâ caloris accessione in majorem rabiem acta, impetu demum factò, omnes cruoris fibras, ultra texturæ modum distensas, frangit ac comminuit. Aquâ fibrarum sanguinearum dissolutione, macularum pestilentialium causam petendam esse censeo, &c.*— Our said Author judg'd that Plague to be an inflammatory Fever, of the most exalted Degree: And he supports his Opinion by very good Arguments, drawn from his own Observations. He says, That for some Weeks, immediately before the Plague broke out, Pleurifies and Quinzies were very rife: And, moreover, that examining the Blood drawn from many of his pestiferous Patients, he found it exactly resemble that of Pleuritics. Here I put an End to a long Quo-

Quotation. Indeed these Things are somewhat foreign to my Temper, as well as my Design: But I could not dispense myself from recognizing some of this celebrated Author's Sentiments upon so important a Subject.

As to what further regards the Cure, (Bleeding being premised, and the Use of the Emulsion, &c. above-described) it must either be conducted by well-adapted Sudorifics; or else we must find out a proper Specific or Antidote to destroy the venomous, pestiferous *Fomes*. Amongst Sudorifics, I recommend the following; *viz.*

Take *Æthiops Mineral*, dr. fs. *Poterius's Antihectic*, gr. xij. *Cochineal*, gr. vj. *Saffron*, gr. iv. the Egg Electuary, scr. ij. Syrup of Marshmallows, q. f. to make a Bolus: To be taken every third Hour; drinking after, a large Draught of the following Apozem, made warm:

Take Roots of *Scorzonera* and *Sarsaparilla*, of each oz. j fs. of the Five opening Roots, of each dr. v. wild Poppy-flowers, m. j. Let them be boil'd in q. f. of Spring-water to lb. ij. when strain'd; to which add Treacle-water, oz. iv. Syrup of Elder, oz. ij. Mix, and give it.

Those Medicines will bring on a gentle, amicable *Diaphoresis*, without enhancing either the Heat or Ebullition of the Blood: And at the same time they are (I flatter myself) well calculated to alter and correct the morbid Matter. If stronger Sudorifics should be required, add to each Bolus of the *Snake-root*, and *Contrayerva*, of each gr. vj. But if all pestilential Fevers, or the Fevers accompanying all Plagues, are really of the inflammatory Sort, (as *Sydenham* has observed of the Plague at *London*) the volatile Salts would do a great deal. And, upon that Supposition, I advise the following:

Take *Poterius's Antihectic*, Venice-treacle, and the Egg Electuary, of each scr. j. volatile Salt of Hartshorn, gr. viij. best Saffron and Cochineal, of each gr. v. Mix, and with q. f. of Syrup of Marshmallows make a Bolus; to be taken every three Hours, drinking after, a Glass of the fore-written Apozem, warm.

Or,

Take Lac Sulphur. dr. fs. Venice-treacle, and the Egg Electuary, of each scr. j. volatile Sal Ammoniac, and best Castor, of each gr. vj. Mix, and with q. f. of Syrup of Marshmallows make a Bolus; to be taken every fourth Hour, with a Draught of the same Apozem.

Or (if the Disease appears to be so strictly and truly of an inflammatory Nature) the following may be experienced; viz.

Take Bezoar-mineral, and *Poterius's* Antihectic, of each gr. xv. Wood-lice prepar'd, gr. x. Russia Castor, gr. v. Rob of Juniper, q. f. to make a Bolus: To be taken every third Hour, drinking after, a Draught of the following Apozem:

Take Stone-horse-dung, lb. fs. fresh Polypody-root, and the Five opening Roots, of each dr. v. Mithridate, oz. fs. Let them be infused warm for three Hours, in lb. iiij. of wild Poppy-water; then boil a little, and strain: In every Pound of the strain'd dissolve volatile Sal Ammoniac, scr. j. Syrup of Elder, dr. xij. Mix.

Perhaps the Nature of the Disease may require yet stronger Sudorifics; that is, that the Sudorifics above-described be increased in their Doses: Though, I believe, we have but few Examples of sudorific Medicines given in larger Doses; especially when so often repeated. However, it must be allowed, that Medicines should be given in a certain necessary Quantity, as well as be endued with the proper and requisite Qualities, in order to extirpate or cure a Disease. And I know several Physicians, who are so extremely cautious and fearful of over-dosing their Patients, that, if they judg'd like Angels, with respect to the Quality of Medicines, they would starve them, or (which is much the same thing) let them die, for want of a sufficient Quantity. But the Physicians I allude to, are not of the *British* Order.

An *Emetic* may be administer'd after Bleeding, if Disorders of the Stomach indicate the Necessity of it; otherwise, I would rather avoid it.

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Emollient Glysters may be given, and repeated occasionally, through the whole Course of the Disease, if Circumstances require it.

As to Specifics or Antidotes for this Disease, if ever discover'd, I believe they must be derived from a mercurial or antimonial Basis.—I will venture to offer some Examples :

Take Quicksilver drawn from Cinnabar, or depurated after another manner described, common Salt very pure, and without any Humidity, of each equal Parts; let them be rubb'd together in a marble Mortar, until the Mercury is most perfectly divided and extinguish'd: Of which take dr. iv. Conserve of Mallows, q. f. to make forty Pills; of which take four for a Dose, every third or fourth Hour, with a Draught of the fore-written Apozem.

Or,

Take our Electuary of Quicksilver, dr. j. Make a Bolus: To be taken every fourth Hour, either increasing or diminishing the Dose, as Need shall require.

Or,

Take alkalized Mercury, scr. ij. Rhubarb, gr. x. Venice-treacle, scr. j. Syrup of Poppy-heads, q. f. to make a Bolus: To be taken every fourth Hour.

Another Method :

Take antimonial Æthiops, and Venice-treacle, of each dr. iij. of which make thirty-six Pills, and take two every third Hour, drinking after, a Draught of the fore-written Apozem.

Probably Methods of this Kind have never yet been practis'd in Plagues, or pestilential Fevers; though I can't see why they should not turn to good Account. And (whether with regard to the pestilential, or other Kinds of Fevers) I never heard any Reason yet assign'd and exhibited, why these more powerful Alteratives should not be proper and good to correct, kill, and exterminate the constituent morbid Humours of acute Diseases, as well as those of the *Chronic*. These Things deserve strict Attention and Consideration.

ation. And such Physicians as attend public Hospitals, and have great Numbers of Sick daily under their Care and Inspection, might make very seasonable, sufficient, and (perhaps) very advantageous Trials of them.

Without Doubt, such an extraordinary Sally out of the common Road would be styl'd (according to the vulgar Expression) trying Practices upon Patients. 'Tis true, it would be trying Practices: But such as would be very laudable; and, perhaps, would prove very beneficial to the Community.

I can't forbear reflecting and remarking on that Passage of *Sydenham* (above-quoted) which is so contrary and repugnant to the common and general Tenour of his own Sentiments and Writings; that is, where he supposes, that there may lie conceal'd in the Womb of Nature a certain Specific or Antidote for the pestiferous Venom, &c. Which cannot be discover'd, except *à priore*; that is, (being justly interpreted) by the Force of mechanical or philosophical Reasoning. I could offer innumerable other Processes, (besides the above-mention'd) in the same View, and to the same End, if my Time and Paper-room would allow of it. But, perhaps, those may be sufficient to inspire other Physicians with the same Sentiment, and inspirit them to make some Trials of it.

As the Plague (blessed be God!) is not now amongst us, such Medicines may be made Trial of in other Kinds of severe and desperate Malignants, *pro tempore*: And if they should succeed well in such Cases, a great deal might be hoped from them in this.

Blisters, after seasonable and due Evacuations, will undoubtedly be of great Use; for, first, they will promote and expedite the Separation of the morbid Humours from the Blood; and, secondly, they will either hasten and bring on a critical Termination of the same, upon the Superficies of the Body, in the
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Form of Swellings, call'd Buboes, Carbuncles, and the like, or else may exterminate and draw them off by themselves.

Of all the various Methods I have laid down for the Cure of this Disease, whether those design'd to promote a *Diaphoresis*, and gentle Sweat, or those recommended as Specifics, to kill and destroy the venine, pestiferous Matter, not one of them can be suspected of exaggerating and confusing the Motion of the Fluids, so as to thwart and subvert the Designs of Nature, by intimately blending, and more perfectly uniting, the morbid Humours with the Blood. On the contrary, they will operate easily, equably, and uniformly; and, I hope and believe, successfully. They will, in all Probability, correct the morbid Humours, destroy their Cohesion, and intimate Union, with the Blood: And if they don't or can't eliminate the same by gentle Sweats or Urine, they will dispose them to the Superficies of the Body, in the salutary Form of Abscesses.

When any Swellings appear in the *Parotides*, *Axillaries*, or Groins, their Suppuration should be hasten'd, as much as possible, by proper Topics: For, so soon as such Swellings break, and discharge their Contents, the Patient is greatly relieved by it.

When happily a Person is recover'd of this dismal Disease, some Doses of proper Physic will be necessary, to sweep off the Recrements or *Sordes* of the morbid Matter. And, to that Purpose, I advise the following; *viz.*

Take Species of *Hiera Picra*, and *Rhubarb*, of each scr. j. *Calomel*, gr. xij. *Diagrydium*, and Salt of Tartar, of each gr. v. Make five Pills; to be taken every third Morning.



C H A P. VII.

Of Intermitting FEVERS.

INtermitting Fevers are divided into three Sorts ; or rather are distinguish'd by three Names ; viz. the *Quotidian*, *Tertian*, and *Quartan*. To these three general Kinds (which are so called, on account of the different Distances betwixt their respective Paroxysms) is superadded another, called a *Double Tertian*.

Sydenham very justly pronounces every Paroxysm of an intermitting Fever to be a true, genuine, continual Fever, though of a shorter Duration. The Reasonableness and Truth of this Distinction will appear plain, and merit universal Assent, if we compare it in all its Symptoms and Circumstances (that of its short Duration only excepted) to other continual Fevers ; for these have their regular *Stadia*, (viz. their Beginning, State, and Declination) as well as those. In Fact, the several Stages of Intermittents greatly resemble those of Fevers that we more strictly called continual, in all these respects ; and there seems to be no real or essential Difference, except only in the Times of their Duration.

Continual Fevers (especially the malignant Sort) generally begin with a Shivering or *Horrescentia*, as Intermittents do ; and are alike accompanied with Sickness at Stomach, and a Vomiting or Reaching. This Shivering (in both alike) is succeeded by an intense Fever, attended with acute Pains in the Head, Loins, Limbs, and perhaps all the muscular Parts of the Body ; Difficulty of Breathing, &c. When the febrile Matter (in one as well as the other) is either concocted or comminuted, and its Cohesion and intimate Union with the Blood, broken, dissolved, and

and destroyed ; then comes on the Despumation (as *Sydenham* calls it) or *Crisis* ; which is always performed by copious Sweats in Intermittents, and, generally speaking, either by Sweat or Urine in the continual. But I will further illustrate the Justness of *Sydenham's* Verdict concerning these Fevers, by drawing a familiar Parallel.

We see some Persons (*expertus ego ipse loquor* ; for I have known several Instances of it) who are constantly subject to long, continual Fevers, twice every Year ; viz. at the Spring and Fall of the Leaf ; which shall always happen at the same time, or nearly so.——Why may not these be (with equal Propriety) called Intermittent Fevers ? Only as their Paroxysms are much longer, so their Intervals are more perfect and extensive. It will, I promise myself, be no difficult Matter to paint out the different Essences of such Fevers, and common Intermittents, to the Life ; and to render them obvious (as it were) to the Eye.

I suppose then, that the morbid Matter, constituting or producing those habitual vernal and autumnal Fevers, is gradually generating and forming from the Termination or Ending of one, till the Beginning of another. And this is exactly the State of the Case in the more genuine Intermittents. But to assign a proper and rational Cause for those regular Returns of continual Fevers every Spring and Fall ; I presume, and lay it down as undeniable Matter of Fact, that those continual Fevers result, not from an accidental, but from an habitual Cause ; that is, from an habitual Error, either in our Accretions or Secretions ; or else, from a partial, a defective, or undue Use of the Non-naturals.

Suppose, for Example, that a Person's constant and daily Food was such (with respect to its Quality, Quantity, or both) as he could not perfectly digest, comminute, and assimilate ; he will necessarily (under

der this Course of Living) ingender ill Humours, and will be daily laying up Fuel for a Disease, which the opposite Seasons of Spring and Fall are the most apt to put in Action.

Indeed, one would think, that the Summer and Winter, the former by agitating and rarefying, and the latter by chilling and condensing, the Motion of the Fluids too much, are Seasons well enough calculated to produce Diseases.

But then, we are likewise to consider, that each of these is an intermediate Time betwixt one Fever and another: And if we only refer to what has just now been said; *viz.* That the generative Cause of those Fevers is not accidental and violent, but habitual, gradual, and uniform; so we shall find there cannot be a sufficient Stock of Matter heaped up, to produce the Disease in question, in either of those Seasons of the Year: And in this Particular again, these Fevers exactly resemble common Intermittents.

Another probable Cause of those constant Returns of Fevers, at Spring and Fall of the Leaf, may be an Error or Defect in our Secretions, especially that of Perspiration: For if the excretory Pores of the Skin are habitually over-contracted, or otherwise are obstructed and choaked in any measure; the thinner Serum or Lymph, designed by Nature to be secreted that way, will be retained in proportion. Hence the Seeds of a Fever are most naturally and commonly sown, and will be gradually growing up, till they come to Maturity.

The Reason why these continual Fevers observe such exact Times of returning, (as precisely at Spring and Fall) may, I think, be made very plain and clear.

The antecedent or first Cause is (as I have already noted) habitual and constant; and the mediate Cause is gradual, equal, and uniform. Now, 'tis probable and reasonable to suppose, that a certain given Quantity

tity of these febrile Seeds or Principles may fluctuate in, and circulate with the Blood, without offending or interrupting the animal *Œ*conomy in the least; especially so long as they retain their original State and Fineness. But on the contrary, when such a Quantity of them are accumulated or heaped up in the Blood, that they approach nearer, and come into a closer Contact with each other (the Degree of which Approach, however, is to be given, and may be imagin'd, though not to be adjusted and ascertained); then they aggregate, cluster, and combine together: And hence they form, first, Coagulations in the Fluids; and afterwards, Obstructions in the Lymphatics, and capillary Arteries, which constitute the more immediate Cause of a Fever; and that the more common and genuine Intermittents are formed and produced by the same Mechanism, shall be shewn by-and-by.

It may be asked (perhaps) how it comes to pass that these vernal and autumnal Fevers continue so long as to three, four, five, or six Weeks sometimes; and why their Paroxysms are not resolved in less than a natural Day, as it happens always in Intermittents. To this I answer, That as these Fevers have a slow Growth, and depend upon an habitual, not an accidental Cause; so their Seeds or Principles must have acquired a stronger Texture, and a greater Degree of Solidity, than those that form and constitute the genuine Intermittents, which are always founded in Accident, and are (at most) of but two or three Days Growth.

All intermitting Fevers, howsoever distinguish'd, (*viz.* whether Quotidians, Tertians, or Quartans) are (as above observed) founded in Accident: They most commonly and generally arise from a sudden Constipation of the excretory Pores of the Skin. Sometimes they proceed from Damps and Fogs; such as often happen to rise upon low, marshy Lands: Sometimes

Sometimes again, from a gross, heavy, dense Air (wheresoever it may be); and at other Times, from accidental and excessive Evacuations, especially by Bleeding or Stool.

When intermittent Fevers result from such Evacuations, 'tis generally in such Constitutions as are very incident to the Disease; or perhaps such as have but lately recovered from it.

Nothing is more common, than to see Persons relapse into an intermittent Fever (who had been happily cured of it by the *Cortex*, a Month or six Weeks before) upon copious Bleeding, or an accidental Looseness: And hence many Physicians, as well as others, have judged and concluded, that the febrile Matter was not really cured and extirpated by the Use of the *Cortex Peruv*. But on the contrary, they have imagined, that it was only lock'd up, and, as it were, chained and confined from the accustomed Way of displaying itself in the Shape of a Fever; and consequently, that when these were either loosened or weakened by copious Bleeding, or an accidental Looseness, the morbid Humours escaped from their Imprisonment, and revived the same Scene as before.

These whimsical Notions, indeed, might become an ignorant Laic well enough: But I am surpris'd, that Physicians, and Men of great Capacity and Erudition, should form such jejune, irrational Conclusions; and some great Men of the Faculty, at this Day, are (to my Knowledge) seduced by such odd Conceits, into a strong Aversion to that admirable Remedy. I will therefore, and in this Place endeavour to discover and assign some other, and more honest Cause of intermitting Fevers, thus returning upon copious Bleeding, or a Belly-flux, that the poor, innocent Bark may be disabused and exculpated — And the true State of the Case, as I take it, is thus:

Suppose a Person whose Constitution inclines or addict's him to Agues and intermittent Fevers, to
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have been but lately freed from the Distemper (a Month or six Weeks, for Example) : He loses a considerable Quantity of Blood, either by Choice, or Accident ; or he is seiz'd with a Belly-flux. Either the one or the other of these Evacuations will necessarily tend to weaken the animal Spirits, and enfeeble, for a time, all the animal Functions : What will be the Consequence of this ? Why, the Blood will thereby be render'd vapid and lazy ; and its Force and Action upon the Superficies of the Body, will be proportionably enfeebled : Hence the necessary Quantity of perspirable Matter will be but imperfectly or partially carried off ; and consequently some Part of it will remain in the Blood.

'Tis possible, indeed, that the Blood may not from hence become redundant, or exceed its due Quantity or Measure : But then it will certainly be vitiated in its Quality ; which is always sufficient to bring on these Fevers : For, in order to maintain and preserve Health in general, and to guard against this Sort of Fever in particular, 'tis not altogether sufficient, that the complex Fluid (the Blood) be only confined to its proper and natural Quantity ; but it is likewise requisite, that all its component Parts should be in their due relative Proportions, one to another ; otherwise the Whole will become noxious and offensive to the Constitution : But moreover, when the Blood's *Impetus*, or Action upon the Superficies of the Body is thus weakened and impair'd, the Barrier without will be enfeebled proportionably ; and thence the Constitution will become an easy Prey to the common Inclemencies of the Air and Weather ; for it is the Quantity of Matter, thrown off by insensible Perspiration, and the Spring or Force with which it is propelled, that is our best and surest Barrier against this and many other Diseases.

Sydenham, out of a criminal Modesty, (for it could not be Want of Capacity, surely) confesses his Inability
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to account for all the various Phenomena of intermitting Fevers. These are his Words expressly : *Nunc autem, si quis à me causam quæsierit, cur somes ille delitescens, effervescentia præcedenti non satis subactus, ac proinde cum reliquâ materiâ peccante non expulsus, proindeque novas tragædias daturus, non eodem modo in omni febre intermittenti progrediatur (nam nunc unum, nunc duos, nunc tres dies exigit, priusquam ad maturitatem perveniat, novumque paroxysmum excitet); de hac re, inquam, si quis mihi negotium exhibeat, ego plane me nescire fateor.*—However, I shall not in the least be discourag'd by the great Sydenham's frugal Example; but on the contrary will exert my best Endeavours to untie this Gordian Knot; to explain and account for all the profound, mysterious Appearances of this Disease: And this I will do with the utmost Brevity, Clearness, and Perspicuity I am Master of.

First, I assert and lay it down for undeniable Truth, and Matter of Fact, that all intermittent Fevers whatsoever (whether they be Quotidians, Tertians, or Quartans) proceed from one common Cause, viz. a Retention, and consequent Surcharge of perspirable Matter in the Blood.

This Retention, and consequent Surcharge of perspirable Matter may be caused several ways, but more especially two; to which I shall confine my Animadversions: And first, this Effect may proceed from a sudden Constipation, and consequent Obstruction of the excretory Pores of the Skin: Or, 2dly, by whatsoever can or does impair and lessen the Spring, Vigour, and Action of the Blood upon the Superficies of the Body: For from hence, 'tis plain, that the Secretion and Discharge of perspirable Matter will be but weakly and partially executed; as has already been sufficiently explained.

Intermitting Fevers differ in this Particular from all other Fevers whatever; viz. That they can only be produced from Errors, or a Defect of Perspiration,

tion, and cannot possibly arise from any other Cause whatever; whereas all the other Kinds of Fevers may each of them proceed from Variety of Causes. Taking it for granted, therefore, that all intermittent Fevers flow from this Source, or first Cause, I proceed to shew by what Mechanism they are formed and brought about; to explain (so far as in me lies) their true Essences; and to account for their different Times of returning: As for Example, some every Day; some every second Day; and others again every third Day.

When the Foundation or first Cause of this Disease is once laid, which (as has been already observ'd) consists either in a Constipation and Obstruction of the excretory Pores of the Skin, or else in an Abatement and Diminution of the Spring, Action, and *Impetus* of the Blood, upon the Superficies of the Body; in consequence of which the Office of Perspiration will be but imperfectly executed and performed — I say, when the Foundation of this Disease is thus once laid, the first or most immediate Effect or Consequence will be, a Surcharge of that saline Lymph (destin'd by Nature to be discharg'd by the Pores of the Skin, in the manner of insensible Perspiration) in the Blood.

This saline Lymph or *Lentor* may (as it is evident to Demonstration it often does) continue fluctuating in, and circulating with, the Blood for some time, without giving the least Offence, or in any wise interrupting the natural Functions: But then, (the original or first Cause remaining) the said Surcharge of saline Lymph constantly augmenting and increasing, a sufficient Stock is at length accumulated and heaped up, to produce a Fit; which I presume to be brought about in manner following; *viz.* When a certain, necessary Quantity of the supposed saline Lymph or *Lentor* is accumulated in the Blood, so that its Parts
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or Particles (uniformly diffused through the whole Mass) approach gradually into a nearer Contact with each other; they will at length (in Obedience to the universal Law of Attraction, which obtains in all Species of Matter; but more especially disposes all similar, homogeneous Particles, to incline and unite together) aggregate and cluster, or run many into one: Hence, first of all, they produce Coagulations; and 2^{dly}, Obstructions in the lymphatic Glands, and the finer capillary Arteries: And these Obstructions, (with the Effects that necessarily depend on them) are what form and constitute the more immediate Cause of these Fevers.

It is this redundant, saline Lymph or *Lentor*, which (first coagulating the Fluids, and then stagnating in all the smaller capillary Arteries, as well those of the *Viscera* and *Primæ Viæ*, as these of the Superficies of the Body) stimulating the fibrous Coats of its containing Glands and Vessels, causes that *Exborrescentia* or Shivering.

This Shivering, which is commonly attended with Sickness, and Reaching, or Vomiting, will last any Measure of Time, from that of half an Hour, to an Hour and half: But its Duration is seldom of less Extent than half an Hour, and very rarely exceeds an Hour and half: And whenever it goes off, (be it sooner or later) it is immediately succeeded by a burning Fever, which (for the most part) is very intense and violent, so long as it lasts.

The Extent and Duration of febrile Paroxysms is very variable; that is, they vary in different Subjects, but very seldom vary in themselves: As for Example, In this Person the febrile Paroxysm shall be finish'd in four Hours time; in that, it shall last twelve Hours; beyond which Measure it very seldom extends.

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In various other Subjects, again, it will extend to all the different Degrees of the intermediate Space; as in some to six; in others to eight; and in others to ten Hours.

The febrile Paroxysms (as above observ'd) seldom vary in one and the same Subject; but are generally equal, or (if I may be allowed the Expression) parallel to themselves; I mean, in the Times of their Returns and Duration, and in the Number and Degree of their concomitant Symptoms: But here I recur to that Period or State of the Disease, when the Shivering gives Place to the burning Fever; and shall endeavour to shew, by what Means or Mechanism this remarkable Change is brought about.

The sharp, saline Lymph or *Lentor* in the Blood, greatly exceeding its natural and due Proportion, will either coagulate of itself; or else dispose the whole complex Fluid to coagulate: The most immediate Effect necessarily arising from hence, will be Obstructions in the finer capillary Arteries, and lymphatic Glands: The morbid Humours, which form and constitute these Obstructions, stimulating the fibrous Coats of their containing Vessels, will augment their *Nisus*, or vibrative Force, upon themselves; that is, upon the said stagnant, stimulating Humours. Hence (*viz.* by the increased *Nisus*, or vibrative Force, of the arterial Vessels) the stagnant, obstructing Matter is first broken and comminuted; and afterwards, doubtless, some Part (at least) of those obstructing, morbid Humours, are thrown back upon the Blood in the larger Arteries, where they instantly cause a violent Ferment or Effervescence. But furthermore, this supposed Ferment or Effervescence, stirred up in the Blood by the Regurgitation or Repulsion of some Part of the sharp, saline, stagnant Humours, will not be a little favour'd and assisted by such of the morbid Humours as yet remain stagnant in the more fine and remote capillary Arteries:

For as the remaining stagnant Humours will (by their *Stimulus*) enhance the *Nisus*, and vibrative Force, of the arterial Vessels upon their contain'd Fluids ; so the Blood will recoil or reverberate upon them, with a proportionable Augmentation of its *Impetus*. And thus the Solids and Fluids acting mutually and reciprocally upon each other, in a preternatural and increased Degree, will necessarily contribute a great deal to heighten the Flame. And under these supposed Circumstances, I think, we may palpably discern, or (at least) conceive, every individual Symptom, common to the febrile Paroxysm : Such, for Example, as a quick, saliant Pulse ; an intense Heat all over the Body ; excruciating Pains all over the Body, especially in the Head, Loins, Limbs, and other muscular Parts ; *Deliriums*, extreme Thirst, and Difficulty of breathing.

Were the Paroxysms of intermitting Fevers to continue several Days together, raging with that Violence we sometimes see them ; the utmost Force and Strength of human Nature would scarce be able to weather it : But providentially, as these Paroxysms are very severe, so they are of short Duration ; for as the morbid Humours that constitute and form them, are but of a late or recent Growth, *viz.* a Day, two, or three at furthest ; so they have not acquired a Texture and Solidity, sufficient to resist and baffle the Efforts of Nature for a longer Time than twelve Hours, at most : Or, if ever a febrile Paroxysm should maintain a Siege longer than twelve Hours, (and I have known one Instance of it) it may be said to be *rara avis in terris*, &c.

After the Blood has thus continued boiling for a certain determinate Time, (which determinate Time, however, differs, as above-said, in different Subjects) the Fuel that caused and supported it thus long, seems, as it were, to be spent, and the Flame dies : That is, the morbid Humours are either digested
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and concocted, and so render'd mild, benign, and offenceless; or else their Texture, Cohesion, and Combinations are intirely broken, dissolved, and destroyed. And here comes on the Despumation, (as *Sydenham* beautifully terms it) in which Act or Scene the morbid Matter is protruded or thrust off by the Pores of the Skin, in copious Sweats.

So soon as those Sweats take place, the Fever abates: And as those continue, this goes intirely off, and the Patient (apparently) is restored to perfect Health. But, alas! from the very Instant one Fit is at an End, the proper Fewel is laying up for another, which gradually accumulates and grows, (if not prevented or supplanted by the Force of Nature or Medicine) till the necessary Quantity is heaped up; and then another Paroxysm is brought on, exactly in the same Manner, and by the same Mechanism, as before.

It may seem very surprizing and unaccountable, (considering this Disease is generally caused by a Constipation of the excretory Pores of the Skin, and that its Crisis, or Way of going off, is always performed by copious Sweats) that the Cause of the Disease should not be removed in the same Act; that is, carried off with its Effect. However, that this does not happen, (commonly speaking at least) is certain: For we see many intermitting Fevers, which (for want of proper Remedies, or through injudicious Applications) shall maintain their regular Returns, and in their full Force, for a long time; notwithstanding the Paroxysm always goes off with a copious Sweat: Whence it appears, that the Cause still remains the same, and is not in the least diminish'd or removed by these Sweats. But the Reason of all this will appear plain, and the Mystery will be cleared up, if we examine minutely into the different Orders and Constitutions of Glands or Pores on the Superficies of the human Body, together with their respective Offices.

There are, then, on the Superficies of our Bodies, two general Kinds of Glands or Pores; the one called the excretory, and the other recipient. The former are again subdivided, according to their respective Functions.

These different Sorts of excretory Pores are adapted (either by their respective Figures or Magnitudes) to the particular Humours designed to be secreted by them; and so long as they preserve and retain their natural State, will not admit or give Passage to any others. Thus there are the transpiratory Glands; the perspiratory, and others, again, designed and fitted for the Discharge of a grosser Substance, called Sweat, which is of too oily and tenacious a Nature, to pass off by any of the first-mention'd Glands.

But here (perhaps) another Difficulty will arise. It may be asked, if the subtil Matter of insensible Perspiration and Transpiration are not thrown off confusedly (with the grosser Matter of Sweat) during the Crisis of the Fever: To this I answer in Advance, that it is possible (indeed) these more subtil Humours may in some measure be propelled and thrown off, in common with the grosser, during the Sweat: But nevertheless, so soon as the Sweat is gone off, and the Body returns to its former Temperament, the proper Glands, appointed by Nature for the Secretion of these Humours, remaining yet obstructed and constipated, fresh Matter of Fuel for the Disease will be momentarily generating and laying up.

The Regeneration of febrile Matter, betwixt the going off of one Paroxysm, and the coming on of another, seems to be carried on with so much Regularity and Equality, that, was it possible to determine on, and ascertain the Quantity of Matter requisite to form a Paroxysm, one might calculate to a Grain, how much of this saline Lymph was unduly retained in the Body each Hour. As for Example: Suppose the Quantity necessary to produce a Pa-
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roxyſm to be eighteen Ounces ; and the Interval betwixt the ending of one Fit, and the Beginning of another, to be thirty-fix Hours ; in that Caſe, 'tis plain, the Quantity of febrile Matter gain'd and hoarded up each Hour, would be half an Ounce.

Intermittent Fevers are frequently found to vary in their Times or Hours of returning: But then they ſeem to be regular, even in this Irregularity. This ſame Irregularity more frequently appears in *Tertians*, than in *Quotidians* or *Quartans*: At leaſt, this is what my own Obſervations have ſuggeſted to me. Suppoſe (for Example) the firſt Fit to come on at Twelve o'Clock, or Noon-day, and to return the ſecond Day thereafter, one Hour or two either ſooner or later ; in that Caſe (at leaſt, ſo it generally happens) every ſucceeding Fit will be found to vary from the preceding, in the ſame Manner, and Proportion of Time. But to explain the Cauſes or Reaſons of theſe Variations: Suppoſe a febrile Paroxyſm (from the Time of its firſt coming on, to its going off) to be ten Hours, and the Interval, or Time required for the furniſhing a freſh Stock of Matter to form another Fit, to be thirty-five Hours ; in that Caſe, the ſecond Paroxyſm will come on three Hours earlier in the Day than the firſt did: And ſo *vice verſâ*. On the contrary: If a febrile Paroxyſm, and its ſucceeding Interval, take up preciſely forty-eight Hours, 'tis plain the ſecond Fit will come on exactly at the ſame Time of the Day as the preceding did. But, univerſally, as they happen to lack of, or exceed that Meaſure of Time, ſo each ſucceeding Fit will come on proportionably ſooner or later than that immediately preceding.

It appear'd a great Myſtery to *Sydenham*, and 'tis what he confeſs'd his Inability to account for, (as appears by the Paſſage above-cited) why intermittent Fevers differ'd ſo much from one another in their Periods, or Times of Return and Duration: As, Why in a *Quotidian* the Paroxyſm returns every Day? In

a *Tertian*, every second Day? And, in a *Quartan*, every third? Now, for my own part, I think there is nothing can be more demonstrable; as I shall endeavour to make appear.

Let us suppose three Persons, of equal Ages and Constitutions, to be seiz'd with the three different Sorts of intermittent Fevers; viz. one with a *Quotidian*, another with a *Tertian*, and the third with a *Quartan*. Suppose again, that the Paroxysms in each are equal, as to the Number and Violence of their Symptoms, and in the Times of their Duration: *Ex. gr.* Put the Case, that the Paroxysm in each is of twelve Hours Duration; and, consequently, that the Interval of the *Quotidian* is twelve Hours, that of the *Tertian* thirty-six Hours, and that of the *Quartan* sixty Hours — From hence it follows, and, I think, appears demonstratively, that the antecedent or first Cause of the *Quotidian* exists in a triplicate *Ratio* to that of the *Tertian*, and in a quintuplicate *Ratio* to that of the *Quartan*: Or, in other Words, that as much febrile Matter is accumulated and formed, during the Interval of the *Quotidian*, (which is but of twelve Hours) as in that of the *Tertian*, which is of thirty-six Hours; or as in that of the *Quartan*, which is sixty Hours. From all which it is evident, that the antecedent or first Cause, as it existed in the *Quotidian*, is three times greater than it is in the *Tertian*, and five times greater than it is in the *Quartan*.

The celebrated Author, whom I have so often made mention of in this Chapter, supposes a very strict Parity betwixt continual Fevers and the intermittent, with respect to their Nature and Essences; and that their chief Difference consists only in the different Steps Nature takes, (when the Business is left wholly to herself) in bringing about the Solution of each. He says, that Nature (if not thwarted or interrupted) generally perfects the Effervescence in continual Fevers, and brings on the *Crisis* or *Despumation*, (as he terms it) in

in three hundred thirty-six Hours, or fourteen natural Days: And then he applies the Example to Intermittents.

He insinuates, that Nature, when she has undertaken the Cure of a continual Fever, goes through with it, and does not desert or abandon the Work till she has finish'd it. But, in the Cure of Intermittents, he supposes she does it by piece-meal. He says, that in intermittent Fevers, (*Quartans*, for Example) Nature, working at the Rate of five Hours and a half every third Day, perfects the Despumation of the Blood in the Space of six Months. Now, five Hours and a half, multiplied by 61, (which is equal to the third Part of the Days in six Months) amounts to three hundred and thirty-six Hours, or nearly so: Which make up exactly the Sum of fourteen natural Days. Thus our Author makes three hundred and thirty-six Hours, or the Sum of fourteen natural Days, the ordinary Time that Nature takes (when the Work is intirely left to herself) to despumate and clarify the Blood in all Fevers, as well intermittent as continual. But I fancy the Observations and Experience of every Physician will prove this Calculation liable to great Exception, whether with regard to continual or intermittent Fevers.

It is plainly to be inferr'd, from the Words of our Author's Text, that he imagin'd the whole Bulk of febrile Matter, upon which so many Paroxysms depend, existed in the Blood altogether at the Beginning. He seems to have no manner of Notion, that the febrile Matter constituting each Paroxysm is intirely vanquish'd by the Fever, and expell'd at the *Crisis*; and, consequently, he could see no Necessity for the Regeneration and Formation of Matter afresh, betwixt the going off of one Fit, and the coming on of another. I thought myself indispensably oblig'd to shew the Inconsistency of *Sydenham's* Notion upon this Matter, though much against my Will, as he is

an Author I admire in the general ; because, seeing his Sentiments upon this Subject are somewhat repugnant to my own, so probably they might, otherwise, have been objected to me. But, to conclude this Remark, I am sure *Sydenham's* Notions upon the Subject in question will not stand the Test of a close Examination, whatever mine may do : And I flatter myself, I could be able to defend my own against all Opposition.

But here I must beg Leave to observe, that, besides the above-mention'd Causes, which I have pronounc'd the universal Parents of these Fevers, there are yet some others, which (though more rarely) may possibly, and not unjustly, assert their Title to it. As, for Example : Any such ill Habit, existing either in the *Primæ Viæ*, or in the Blood, as generates Acidity and Viscidity in the latter, may possibly, and not improbably, produce this Disease. Errors in the Use of the *Non-naturals*, or in any of the Digestions, (whether it be the first or second, or the third and last) may likewise produce this Effect. And supposing the Disease an Effect of one or other of these Causes, though the whole Bulk of the morbid Matter be intirely subdued during the Effervescence, and totally discharged in the Despumation or *Crisis* ; yet as the generative Cause still subsists, a fresh Stock will be momentarily forming and accumulating, from the Extinction of one Fit, till a sufficient Quantity is prepared to produce another. And though this Disease is sometimes protracted to a great Length of Time, even to whole Years ; yet we very rarely find the Paroxysms diminish, either in the Degree of their Symptoms, or the Times of their Duration, till the Disease is overcome by Medicine, or yields to some remarkable Effort of Nature, or some extraordinary Accident. Thus I have been pretty copious, in explaining the true Nature, and genuine Essence, of the various intermittent Fevers : And it may be thought, perhaps, that I have exceeded

exceeded the Limits I prescribed to myself in the Beginning of the Chapter. I promise myself, however, that I shall not stand charged with too great Prolixity, or that I have protracted the Discourse further than is really necessary.

It ought to be consider'd, that this is one of those Diseases to which human Kind are most subject: That it is (more or less) the Growth, not only of every Country and Climate, but of every Season of the Year likewise. Moreover, that these Fevers (which seem to be but imperfectly understood by many Physicians, or at least, I may aver, are but weakly conducted by them) spoil and ruin abundance of good Constitutions, and often degenerate into other Diseases of the chronic Kind; some of which are absolutely incurable, and others very difficult of Cure.

The chronical Diseases, which these Fevers (through Neglect, or ill-concerted, injudicious Applications of Cure) most naturally tend to, and terminate in, are usually inveterate, stubborn Scurvies and Jaundices, and sometimes (though more rarely) Dropsies and Atrophies. Since then a Disease, to which we are all, and every one of us, more or less liable, has so fatal a Tendency, through Neglect, or ill-conducted Attempts of Cure, no Endeavours or Pains should be spared to set it in the clearest Light it is capable of; and that its Cure should be put upon the speediest, best, and surest Footing. And, by this means, I assure myself, that the Ruin of many a good Constitution, as well as the Access of many fatal, chronical Diseases, will be prevented.

From what has been said concerning the Causes, Nature and Essence of these Fevers, it is plainly to be inferr'd, that the Intentions and Methods of Cure are as follow: *viz.* 1st, Supposing the Physician to be call'd in the Time of the Fit, or febrile Paroxysm; let him order some warm, soft, diluting Liquor, to be drank very plentifully, (such, for Example, as Sack-

Sack-whey, in which Saffron or dry'd Marygold-flowers have been boil'd, or the Decoction for Syrup of Marshmallows, with *Scorzonera* Roots boil'd in it) in order to facilitate and expedite the *Crisis*, and to promote a more copious Discharge by Sweat. And so soon as the Sweat is over, the Patient rubb'd dry, and refresh'd a little, I advise cleansing the Stomach by the following *Emetic*:

Take Ipecacuana powder'd, scr. j. emetic Tartar, gr. iiij. Conserve of Hips, q. s. to make a Bolus: To be taken as is mention'd; drinking plentifully of Carduus-tea, in the Time of its Operation.

After the Stomach has been cleansed by the *Emetic*, I advise such Things as may promote gentle Evacuation by Stool, strengthen and corroborate the Stomach and Intestines, and at the same time prevent or lessen (in some measure) the generating of morbid Humours afresh. To answer which Purposes, I recommend the following:

Take Bezoar-mineral, dr. j ss. *Poterius's* Antihectic, and Rhubarb, of each dr. j. Saffron and Russia Castor, of each dr. ss. white Sugar-candy, scr. j. Make a Powder, to be divided into six Papers; one of which let be taken every fourth Hour, drinking after, six Spoonfuls of the following Julep:

Take Salt of Wormwood, dr. ij. fresh Juice of Lemons, oz. iv. Mint-water, oz. vj. Elixir Salutis, oz. iiij. Syrup of Mint, oz. j. Mix.

This Method, if duly practis'd in the Intervals of two or three Fits, will certainly and effectually answer the Purposes and Intentions, for which they are calculated and recommended. And moreover, if they don't cure the Disease, (which I have often known them do) they will at least regulate the Paroxysms, both with regard to their Times of returning, and their Duration: For the Paroxysms at the Beginning of the Disease, and before the Type is formed, are some-

sometimes a little vagrant in both those respects; especially where Intermittents are (properly speaking) what we call irregular. Lastly, the above Medicines will duly prepare and dispose the Body for the great Specific; which will afterwards be more sure, safe, and speedy, in completing a Cure.

The next and last Intention is to supplant the first Cause of the Disease: Which (if it exists internally) is to be brought about by promoting and restoring all the digestive Faculties; or (if external) by strengthening and restoring the impaired Spring, Vigour and Action of the Fluids; by increasing the Elasticity and Flexure of the Solids; and lastly, by forcing open the Obstructions of the excretory Pores, and re-establishing insensible Perspiration or Transpiration. To answer which Purposes, (the necessary Methods being premised) I advise as follows:

Take Jesuits-bark in subtil Powder, scr. ij. Roman Chamomile-flowers, and Rhubarb powder'd, of each gr. v. *Mynsicht's* Tincture of Steel, and his Elixir of Vitriol, of each gtt. x. Let them be rubb'd in a Mortar till it becomes a blackish Powder; to which add Conserve of Sloes, dr. ss. Syrup of Poppy-heads, q. s. to make a Bolus of a soft Consistence; to be swallowed every third Hour, in the Interval of any Fit; drinking after, oz. iij. of the following Infusion:

Take Peruvian Bark gently bruised, dr. vj. Tops of the lesser Centaury, Roman Wormwood, and Chamomile-flowers, of each dr. iij. Virginian Snake-root, Species of Diambre, and lesser Cardamum-seeds, of each dr. ij. Mix; and let them be infused warm for three Hours in lb. iij. of old Rhenish Wine, and strain for Use.

I not only recommend this Process, but I give it under my Hand likewise, as an absolute and infallible Cure for all Orders, Degrees, and Distinctions, of intermitting Fevers; whether they be *Quotidians*, *Tertians*, *double Tertians*, or *Quartans*; as also, whether they be preceded with an Ague-fit, or not; which sometimes (though but seldom) is the Case, unless where

where a continual Fever terminates in, or is brought to, an Intermittent. But this must be observ'd by the way, viz. that in *Quotidians*, whose Paroxysms extend to ten or twelve Hours each, the Doses in the first Prescription should be repeated every two Hours; and those in the last every Hour and half, at farthest.

I could multiply and diversify Prescriptions (upon this Head) *ad infinitum*; but as I can recommend this Method (upon the Authority of large Experience) to be absolute and infallible, so it would be needless to add any more.

The last Prescription should be continued for two or three Days after the Patient has escaped a Fit, only the Doses need not be repeated oftener than every four or five Hours; then leave them off, and about a Fortnight after resume their Use, (repeating their Doses only every five or six Hours) which continue for five or six Days successively. Be it further observed, that the Patient (for the Time he intermits the Use of these Medicines) must take especial Care, that he does not catch Cold, nor commit any Excess either in Eating or Drinking.

I will presume to say, when intermitting Fevers are cured by a regular and due Use of the above Process, the Reputation of that noble Medicine (the *Peruvian BARK*) will seldom or never be exposed to Censure and Malediction, which (through the Ignorance and ill Management of some Practitioners) it is at this Day (though very undeservedly) very subject to.

Some Constitutions are extremely addicted to Relapses of this Fever, upon the least Cold they catch; upon Changes of Weather, or even of the Air, from a pure, light, serene State, to the gross, dense, and heavy.

The best and most effectual Preservative to such Constitutions, against the frequent Attacks of these Fevers, are Riding on Horseback, *Sparw* Water, and cold Bathing. By a regular and continued Use of these

these Things, all the animal Functions will be strengthen'd and re-establish'd; the Fluids will be render'd fine, pure, spirituous, and active; the Flexure and Elasticity of the Solids will be preserved or restored; any Sort of Obstructions in the excretory Pores will be prevented, or removed; and all the natural Secretions will either be kept in, or raised to, a just *Æquilibrium*.

Besides the intermittent Fevers above-mention'd, (which are the ordinary and general Appearances, and are vulgarly styled *Agues and Fevers*) there is yet another Sort, which are not preceded with a Shivering. These indeed, though, generally speaking, they claim the same Causes as the former, or nearly so, yet they differ somewhat in their Essence: *Ex. gr.* I suppose and presume, that the morbid Humours constituting this Sort of Intermittents, retain rather to the acrimonious Nature than to the acid; and, consequently, that they dispose the Blood, and animal Juices, rather to Fluidity, Tenuity and Rarefaction, than to Viscidity and Coagulation. Hence these Humours do not produce Obstructions in the capillary Arteries, and lymphatic Glands (which, as already observed, are the necessary and immediate Cause of the Shivering); but, on the contrary, they stir up a Fever, by their intestine Motion and Collision, and the preternatural Irritation they produce on the Solids. These Intermittents, however, are, with equal Certainty, cured by the Process above-described: To which, therefore, I refer them.

It will neither be unseasonable nor unacceptable, I imagine, if in this Place I touch briefly concerning the Virtues and Properties of that admirable Remedy, the *Bark*.

The *Peruvian Bark* (as 'tis obvious to Reason, and is manifested by large Experience) powerfully corrects and reproves all Errors and Defects in the digestive and concoctive Faculties. It eminently dissolves and destroys

destroys all Coagulations, or other Cohesions and Concretions, of Humours in the Blood: And thus it may properly be said to attenuate and comminute the morbid, sanguineous Humours. It not only resolves and destroys the Viscidity and Tenacity of the serous Part of the Blood, but it likewise strengthens and restores the impair'd Texture and *Crafsis*, or the attractile Force, of its *Crassamentum*. It powerfully strengthens and restores the relax'd and weaken'd Solids, or (in other Words) recovers their lost Spring and Elasticity. And lastly, by means and favour of all these previous Benefits and Advantages, it removes cutaneous Obstructions, and establishes a due Measure of insensible Perspiration and Transpiration. Besides these, it powerfully and equally reproves and corrects a redundant Acidity, or predominant Acrimony, in the Blood and Juices: It strengthens the whole nervous System; and further, it not only promotes (in some measure) the Separation of animal Spirits, but confirms their *Crafsis*, or Tone, likewise.

This noble Medicine is not confin'd to the Cure of intermittent Fevers only, but may be applied with Advantage to many chronical Diseases, whose Returns are periodical; such, for Example, as the Gouty, Rheumatic, &c. 'Tis manifest, from Sydenham's Writings, how high an Opinion he had of it in his Time; which is not lessen'd, but (on the contrary) increas'd, upon further Experience and Observation, made by his Followers. Its sovereign Use in preventing or curing Mortifications, is a Virtue of late Days discover'd and ascrib'd to it. And that may serve to prove, *à posteriore*, the Reality and Truth of every individual Property I have before ascribed to it.

C H A P. VIII.

Of the SMALL-POX.

THIS Disease, as it is the Growth of every Country and Climate, so it is the Lot of almost every Person to have once, who happens to live to an advanc'd Age. And furthermore, as it is not only very nauseous, tedious, and dangerous, in its Nature, but likewise fatal to great Numbers; so it has employ'd the Pens, as well as the Practice, of many Physicians of all Ages, in order to shape and direct its Cure, in such manner as may render it most safe, easy, and successful.

The Consideration of this Subject would necessarily lead me to cite numerous Authors, in order to form (in part) my Discourse upon it. But however, as that would be a tedious, and almost endless Task, so I will leave them intirely to themselves, and proceed to deliver my own Sentiments upon the Matter; making some short Remarks (by the way) on the opposite Methods that are inculcated and pursued, by some particular Physicians of the present Time. And if I should happen to appeal further back, I promise not to go beyond our own Countryman, the famous *Sydenham*.

The first Cause, Source or Origin of this Disease, will not admit of so familiar and easy a Definition as that of many other Distempers; as, for Example, the Scurvy, Gout, Pox, Jaundice, Dropsy, Rheumatism, and Fevers in general. However, as it is always agreeable, and even expected, we should assign some first Cause or Origin of the Case we are about to discuss, so I will endeavour to do it with all possible Brevity and Perspicuity; avoiding the Mystical, on the one hand, and the Superstitious, on the other. To proceed then:

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I presume, that there exists, or (if I may be allow'd the Expression) that there is innate, in every human Body, a certain latent Principle, or certain latent Particles of Matter, which are the real first Cause or Origin of the Disease in question. *Secondly*, We suppose this latent Principle, or these Particles of Matter, (as they exist in divers Persons and Constitutions) are (according as they happen to be more mature, ripe, and susceptible of Impregnation) apt to take Fire upon the Access or Approach of variolous *Effluvia*. *Thirdly*, When the supposed latent Principle, or Particles of Matter, are once fired and agitated, they immediately (after the manner of Ferments, which will communicate and multiply themselves *ad infinitum*, provided they meet with a suitable *Pabulum*) contaminate the whole Mass of the Person's Blood; and, changing it into their own specific Nature and Essence, the whole Constitution becomes variolous.

That this is truly the State of the Case, is, I think, very evident: For we have numerous Instances of Persons that never had this Disease, who have lain in Bed betwixt two, perhaps, that were sick of it at a time; have thus pass'd through all the Stages of it, from the first Eruption, till the falling off of the Scabs, and yet have escaped the Infection. And these same Persons (perhaps) have taken the Infection some Years after, only by seeing a diseas'd Person at a Distance, or even upon hearing the Disease named.

It may hence (I think) be concluded, and taken for granted, that the suppos'd Principles or Particles of Matter were immature, and unfit for Impregnation, at the Time or Times they lay in Bed with Persons sick of the Disease; but that afterwards, having then acquired perfect Maturity or Ripeness, they were easily caught hold of. We have several Instances of Persons who have lived to a very advanc'd Age, and though they have frequently visited and com-

communicated with the variolous Sick, yet never caught the Distemper: In such we must suppose the original Seeds of the Disease never came to Maturity, so as to admit of Impregnation.

There is something very singular in this Disease, and almost peculiar to itself (though, I think, the *Measles* lay Claim to the same Prerogative); which is this: A Person who has once had the true, genuine Small-pox, is not liable to catch it a second time, even though he were immersed amongst Legions of variolous Sick. Which sufficiently proves, that the *Stamina*, or original Seeds of the Distemper, are entirely thrust out by that Fever, and that there is not the least Relict of it behind.

This Disease is, in its Nature, a Fever of the eruptive Kind; and as it is commonly ranked amongst them, so I have brought it into the Class of Fevers.

So soon as the *Pustles* appear, the *Crisis* begins; and when they crust and fall off, it is (generally speaking, at least) perfected and finish'd.

Some Physicians are of Opinion, that this Disease may be forestall'd, and its Access absolutely prevented, by the Application of Medicines calculated to kill and destroy its original Seeds, or necessary *Pabulum*, in *Embryo*; witness, the Author of a late Piece, call'd *Synopsis Medicinæ*, &c. This indeed, if practicable, would be a great Consolation to Mankind.

Others are of Opinion, that Methods and Expedients may one Day be found out to kill this Disease (which is the same thing as to cure it) in its febrile State, so as to prevent the Eruption of Pustles. And this, (though not equal to the former Project) if it could be brought about, would be no bad Composition of Matters. But then (supposing this latter practicable) the Patient would always remain in Doubt, whether the Disease he was thus cured of, was really a variolous Fever or not; for we meet with many Fevers, exclusive of the various Fevers of

the eruptive Kind, which very much resemble that preceding the Small-pox. This Opinion (indeed) is favour'd by some very illustrious Votaries. But here we dismiss the further Consideration of these Things, as scarce credible, and, I fear, utterly impracticable: Though, perhaps, I may touch briefly upon them again, anon.

I shall not give myself the Trouble to describe all the various Symptoms of variolous Fevers, because they are already generally known, and may be found to Exactness in abundance of Authors: Therefore shall hasten to what is more material.

The original or first Cause has already been set forth. The second (which comprehends and expresses the Essence of the Disease likewise) depends upon the Action and Exertion of the first, and consists in a Corruption or Putrefaction of the animal Juices. And the third and last Cause, or *Causa proxima*, consists in the particular Disposition, Determination, Action, and Irritation, of the morbid Matter.

The proper Intentions or Indications of Cure are plainly these; *viz.* 1st, To break and destroy the Texture and Cohesion of the morbid Matter. 2^{dly}, To disunite and separate it from the Blood. So soon as that is done, the Eruption comes on; except obstructed or retarded, by Accident or ill Management. 3^{dly}, To conduct and carry on the Eruption easily and equably, and in such manner as may give the least Shock, Offence or Violence to Nature. 4^{thly}, To effectuate and complete the *Crisis*, by procuring a total Discharge of the morbid Matter at the *Pustles*, or Ulcers, on the Superficies of the Body.

Great Care and Circumspection ought to be had concerning the Management of the Fever, through all the Stages of the Disease: For, should that be suffer'd to rise too high, or sink too low, so the Pustles will rise or fall, flow or ebb, accordingly; especially where they are numerous.

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Concerning this great and important Point, very different, and even opposite Notions, are broach'd and disputed amongst the Learned; insomuch that, perhaps, no Age or Country has produced so many and so opposite Notions, concerning the Management of this Disease, as are at this Day debated and practis'd in *Great Britain*.

Our Countryman, *Sydenham*, was the first who introduc'd, practis'd, and recommended the cool *Regimen* amongst us: And he (who saw and experienc'd the Errors and fatal Effects of the over-hot *Regimen*) is very excusable, if he fell a little too much into the contrary Extreme (as a late ingenious Writer observes, by way of Apology for him). Not that I charge him with carrying it too far, (whatever others may have done since, upon his Scheme) because he seem'd to judge too well, and to be too accurate and diligent in observing the Events of Things, to allow of that Supposition.

The Physicians of *France* indeed (to whom I humbly apologize, for not mentioning them sooner) are, perhaps, as preposterous and variable as we are, in their Reasonings upon, and their Methods of treating, this Disease. *Helvetius*, in his Essay on the *Animal Economy*, (to which I refer the Readers) has boldly dared to make a most egregious Sally out of the common Road, in the Method he propounds for treating this Disease: But I fear, this Gentleman's Method will be found, upon Experience, to be no less contradictory to Truth and right Reason, than it is repugnant to the Practice of the present and all past Ages.

I have lately convers'd with some young Physicians, who seem very fond of pursuing the cool *Regimen*, *au pied de la lettre*, and keeping their Patients Bodies constantly lax and open. They pretend (at least) very scrupulously to avoid the Use, not only of Cordials, and the warmer Alexipharmacs, but even of the most gentle Diaphoretics; except particular and

extraordinary Accidents require them: And in place of these, they ply their Patients constantly with Tamarind-drinks, and such-like, (better'd with a little Manna now-and-then) through all the *Stadia* of the Disease. And by these, and the like Methods, they pretend to cure every Body they take in hand, without Exception. But for this I have only their *ipsi dixerunt*, and therefore beg Leave to suspend my Belief of it, till better convinced. Thus I have barely hinted at the Dissentions, and different Opinions, of the Learned, concerning the best and most salutary Methods of treating this Disease. I shall now leave them to themselves, and proceed to deliver my own private Sentiments upon the Matter. But before I proceed, however, I cannot omit to make one Observation, in Opposition to these very sanguine, zealous Advocates, for the cool *Regimen*: Which is this; There is one Maxim in Physic that obtains universally and eternally, *viz.* That where-ever Nature manifestly intends and endeavours to promote and bring on any one Crisis, or Discharge, of the morbid Matter, it is not only preposterous, but repugnant to the plainest, as well as the most coercive Reason, to attempt to thwart or divert her from her own Course. And though many and fatal Consequences have sometimes attended the over-hot *Regimen*, yet I believe those who formally set out, and constantly persist in the other Extreme, will be found (upon a nice and impartial Scrutiny) to have abundantly verified the old Proverb:

Incidit in Scyllam, qui vult vitare Charybdim. Virg.

A *Medium* indeed ought to be observed in this, as well as in all other Things. The temperate *Regimen* should certainly be preferr'd, and recommended: And when cooling Medicines are necessary to repress the too luxuriant Action of the Blood, &c. let them be practis'd
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occasionally and judiciously, but not generally and promiscuously,

The first Intention is (as I have already set forth) to break and destroy the viscous, cohesive Quality, of the morbid Matter; the second, to disunite and separate it from the Blood; the third, gently to protrude or thrust it off at the Superficies of the Body; and the fourth and last, to effectuate and complete the *Crisis*, &c. To answer these several Views and Purposes, Bleeding (a thing almost universally practis'd amongst us, in this Stage of the Disease) is highly necessary, and ought to precede every thing else.

If the Patient be of a robust, plethoric Habit, it ought to be perform'd in large Quantity; *viz.* to twenty, twenty five, or even to thirty Ounces. But the Necessity, as well as the Utility of Bleeding, is not, perhaps, so well understood, as it is generally acknowledg'd.

We are to consider, that when a Person is seiz'd with a variolous Fever, (especially such as precedes a bad kind of Pock) the Blood and Humours are immediately thrown into a very violent Ferment, and consequently the Blood-vessels will become immoderately distended. When this happens in a plethoric Habit, the Symptoms are, in proportion, more grievous, and the Danger greater. But whether this latter (*viz.* a *Plethora*) is the Case or not, when the Blood-vessels are a little emptied and relieved by Bleeding, any Change, proposed to be wrought upon the morbid Humours, is more easily brought about than it could possibly be without that Premissary. Moreover, the necessary Change being once wrought upon the morbid Humours, these will more easily detach and separate themselves from the Blood, after Bleeding, than before; and consequently, Nature's plain Intention of throwing them off upon the Superficies of the Body, will be more easily and happily performed.

But, besides these Advantages, Bleeding, seasonably performed, both as to Time and Quantity, may (as it undoubtedly often does) prevent the Access of a great many dismal Symptoms, to which this Disease is liable, through its various *Stadia*; but more especially *Deliriums*, *Coma's*, *Subsultus's*, *Petechiæ*, bloody Urine, &c. Furthermore, it appears (to me, at least) very reasonable to suppose, and I believe it is often true in Fact, that where Bleeding has been neglected in a variolous Fever, preluding to a confluent Pock, especially in a plethoric Habit, the Blood and Humours are (as it were) suffocated for want of it; and consequently, the Separation and Eruption being thus frustrated and subverted, the Patient is carried off in the febrile State, without any Eruption, to distinguish its particular *Genus*.

I should spin out this Dissertation to an immoderate Length, should I divide and subdivide it, as some Writers have done; and afterwards consider each particular Distinction, Circumstance, and Symptom, apart: Therefore I shall consider it no further than under the ancient Division of distinct, and confluent. And first, of the distinct Sort.

First, draw Blood, to oz. xij. or xv. more or less, according to the Age, Strength and Temperament of the Sick. Then,

Take Ipecacuana powder'd, scr. j. Oxymel of Squills, dr. iij. Mint-water, oz. j. Make a Potion; to be taken three Hours after Bleeding.

Take Cowslip-water, oz. iij. Treacle-water, dr. vj. Syrup of Poppy-heads, oz. j. Mix, and make a Draught; to be taken every Night, if needful, and as Occasion shall require: Add also liquid Laudanum, gtt. x. if the Diarrhœa increaseth.

Take Lac Sulphur, and the purple Powder, of each dr. j. Siberian Castor, scr. j. Pulvis pepticus of Dates, and white Sugar-candy, of each dr. ss. Make a Powder for six Papers; one of which take every six Hours, drinking after, a Draught of the following Julep:

Take

Take distill'd Waters of wild Poppies and of Elder-flowers, of each oz. vj. Treacle-water, and Syrup of Marshmallows, of each oz. ij. Mix for a Julep.

As to the Diet, and ordinary Drink: The former should consist chiefly of Water-gruel, with Mace and Liquorice boil'd in it, and then mix'd with a fifth or sixth Part of generous White-wine, or Canary; Chicken-broth, Panada, Sago, and all Food whatsoever, made with Pease, or things of the farinaceous Kind. For common Drink, Sack-whey, Marygold-tea, or a pectoral Decoction, or a Tea made of Colts-foot and Maiden-hair, sweetened with white Sugar-candy.

This Sort of Small-Pox seldom admits of any violent Symptoms, such as Phrensies, *Deliriums*, *Coma's*, *Subsultus Tendinum*, and the like: Therefore it would be needless to set down a long Catalogue of Remedies, when I may venture to promise an easy, happy, and effectual Cure, from the regular Use of the above.

If any unexpected Symptom or Accident should demand an emollient Glyster, or a lenitive Purge, let them be used discretionally. Let the temperate *Regimen* be always laid down as a Basis; especially with regard to Bed-cloaths, Fires, and the like: For *Phæbus's* Advice to his Son *Phaethon* (*medio tutissimus ibis*) is no-where more strictly applicable than here. But if it should be necessary to force Sweats at any time, (for 'tis always right to indulge them) it had much better be done by proper Medicines, and Plenty of warm, diluting Liquids, than by a huge Heap of Cloaths, and a great Fire.

I think the Reason and Justice of this Distinction must appear plain to Persons of every Capacity, and those of the least Consideration: For, when Sweats are excited by proper Medicines, and Plenty of warm, diluting Liquors, the morbid Matter is at the same time altered and corrected, perhaps, or else digested

and concocted, and so prepared and adapted to pass off that way: Whereas, when Sweats are raised, or forced the other way, the Blood and Humours may be fired and violently agitated indeed, but no Change wrought upon them in the mean time.

However, though this same Sort of Pock generally goes well off, with prudent Management; yet is it not absolutely free from Danger, nor exempt from Death.

If therefore the Pock or Pustles should at any time fall or flatten, recourse must immediately be had to the stronger Cordials, Sudorifics, Alexipharmacs, Blisters, &c.

The confluent Pock is what now presents itself to our Consideration. And this Sort (commonly speaking, at least) is sufficiently typified and foretold, by the Violence of the Fever that precedes the Eruption.

I shall avoid here (as I have all along done, heretofore) acting the Part of an Historian; that is, giving a particular and minute Recital of known Facts, &c. such as the common Symptoms, the Diagnostics, Prognostics, &c. but shall proceed to consider it, first, in a general Sense; secondly, to define the Nature of its more important and momentous Symptoms; and, thirdly, to direct such Methods as shall appear most conducive, either to prevent or cure them.

I have already specified the general Indications of Cure. To lay down particular ones, calculated against every Incident and Accident, to which this Sort of Pock is liable, would be both endless and impossible; because, in some particular Cases, Accidents may happen, and Symptoms appear, which never were noticed before.

The Violence of the Fever that precedes this Sort of Pock, and the Number of Pustles which manifest themselves upon the Eruption, specify the Quantity of morbid Matter: But its Malignity, or Quality, is to be inferred and concluded on from the Number
and

and Nature of the Symptoms that present through the whole *Stadia* of the Disease.

Phrensies and *Deliriums* (Symptoms almost inseparable from this Sort of Pock) may result simply and purely from the Blood's increased *Impetus* on the Brain, and its acrimonious Humours irritating the Nerves and *Meninges*. A *Coma* may proceed from tough, viscid Matter, either stagnating in the smaller Arteries of the Brain, or, at most, passing but very slowly and lazily through them: Whence the supposed Arteries will necessarily become distended, their adjacent Nerves compress'd, and the animal Spirits denied their natural Actions and Operations.—But this explains the *Coma somnolentum* only.—The *Coma vigil* (a Symptom that sometimes happens) depends partly on the same Cause, and partly again on the Nerves being incessantly stimulated by the morbid Humours; which keeps the animal Spirits continually fluctuating and playing upon them, though scarce capable of entering into their Cavities. A *Subsultus Tendinum* always arises from the acrimonious Humours irritating the whole System of the Nerves and Membranes; but more especially the *Dura* and *Pia Mater*. But the Symptoms which denote the highest Malignity and Acrimony, are the *Petechiæ*, *Maculæ nigrae*, and bloody Urine: And these, I think, must undoubtedly flow from the exalted Rarefaction of the Blood, and the extreme Rapidity of its Motion; in consequence of which it bursts through at the Extremities of the capillary Arteries, and so produces the Symptoms in question. Where all or most of these Symptoms concur in the same Subject, it requires great Judgment, Care, and Attention, in the Physician, to manage to the best Advantage.

The sore Throat and *Ptyalismus* (almost infallible Concomitants of this Sort of Pock in Adults) seem to result from a critical or extraordinary Tendency of the morbid Matter to the salival, and other Glands
of

of the Throat, and caus'd, doubtless, by the Weakness of Nature, and her Inability to thrust it off upon the Superficies of the Body, in due Time and Quantity. But here I shall recur to the Beginning of the Disease; set out fairly with it, and take these in my Way, as I go along.

First, Bleeding is to be celebrated, according to the Age and Temperament of the Sick, as was before-mentioned. Then,

Take Ipecacuana, dr. ss. Syrup of Violets, dr. vj. black Cherry-water, oz. j ss. Make a Potion; to be exhibited in the Evening, after Bleeding.

If the Vomiting is not succeeded by two or three gentle Stools, the following Glyster will not be amiss, to unload and cleanse the Intestines:

Take emollient Decoction, oz. xij. Sal Gem, dr. ij. Linseed-oil, oz. j. Mix for a Glyster; to be injected a little after the Operation of the Vomit.

Take Cowslip-flower-water, and Barley Cinnamon-water, of each oz. ij. Syrup of Poppy-heads, oz. j. *Fracastorius's* Confection without Honey, dr. j. Mix for a Draught: To be taken at Night going to Rest, and to be repeated every Night, if Need; to wit, if the Stools, or Want of Sleep, increase.

Now in order to begin, carry on, and perfect a happy and salutary Crisis, we should have the following Intentions always in our View; viz. 1st, Gently to promote the Separation and Expulsion of the morbid Matter. 2^{dly}, When the Pustles are come out, to forward their Maturation, easily and equably. 3^{dly}, To assuage (as the Case shall require) the too exalted and luxuriant Ferment and Rarefaction of the Blood and Humours. 4^{thly}, To obtund and sheath the Acrimony of the morbid Matter, and at the same time to promote their Digestion and Concoction. And I promise myself, where the Physician has sufficient Capacity to discern these

these Intentions, (according as they may one or other predominate, in particular Cases) and has Judgment enough to direct accordingly, the poor Patient will stand a much fairer Chance to recover than he does at the present Time, under the promiscuous, preposterous, irrational Methods, that are now-a-days practis'd by some amongst us.

The general Intentions or Indications being thus laid down, I shall, in general Terms, offer what appears to me most proper to answer them; *viz.*

The above-mentioned Methods being premised,

Take *Æthiops Mineral*, dr. iij. (made with two Parts of *Lac Sulphur.* and one Part of *Mercury* drawn from *Cinnabar*) *Poterius's* *Antihæctic*, and the purple Powder, of each dr. j. Powder of *Contrayerva-root*, *Florentine Orris*, and *Elecampane*, of each dr. ss. white Sugar-candy, dr. j. Make a Powder for six Papers; one of which let be taken every third or fourth Hour, drinking after, oz. vj. of the following *Apozem*:

Take Decoction as for the Syrup of Marshmallows, lb. ij. with *Scorzonera-root*, oz. j. *Florentine Orris* and *Elecampane*, of each oz. ss. boil'd in it; Syrup of Elder, oz. iv. Spirit of Nitre dulcified, dr. iij. Mix, and exhibit it.

Or,

Take *Æthiops Mineral*, prepar'd as before-mention'd, dr. ss. *Bezoar Mineral*, and the purple Powder, of each gr. xij. *Russia* *Castor* and *Camphor*, of each gr. iij. *Mithridate*, and the *Egg Electuary*, of each scr. j. Syrup of Marshmallows, q. s. to make a Bolus: To be taken every fourth Hour, drinking after, oz. vj. of the forewritten *Apozem*.

Either the one or other of these Methods may be continued in Practice through the whole Course of the Disease; except a Looseness, or other accidental Symptoms, require a Change.

If a Looseness does happen, however, indulge it for the Space of one natural Day: But if it should be violent, and difficult to curb, order a cordial astringent Glyster, to be injected every Morning and Evening, if so often required; and continue the above-mention'd

mention'd Draught every Night, adding to each *Laud. Liq. Cydon.* gtt. xv. And under such a Guard, you may safely go on with the Use of the other Medicines. Nor will that Method be found in the least deficient for the sore Throats, and *Ptyalismus*, common to Adults under this Disease; with this Difference, that the Decoction be drank plentifully betwixt-whiles, as well as with the Powders or Bolus's: And besides, in the Room of the *Syr. Sambuci*, put *Syr. de Althæa*, and *Oxymel Scillitic.* of each dr. x.

But suppose the whole Catalogue of dismal Symptoms above-described should appear at one and the same time, what is then to be done? Blisters, indeed, would probably relieve the *Coma*, and take off the *Subsultus*. They are likewise (by all Experience) found good to rescue from a Phrensy, and *Delirium*: Though, considering Things *in primâ facie* only, they should seem bad for it. But as to the bloody Urine, *Petechiæ*, &c. those Symptoms will certainly be rather increas'd than lessen'd, by Blisters: Therefore some other Expedient should be thought of.

To co-assist Blisters, in taking off the *Coma*, *Subsultus*, *Delirium*, &c. such Things as heat, resolve, and attenuate, are highly proper. To which End,

Take Saffron powder'd, and Contrayerva-root, of each gr. xij. Virginian Snake-root and Myrrh, of each gr. v. the Egg Electuary, scr. j. Syrup of Chermes, q. s. to make a Bolus: To be taken every fourth Hour, drinking after, lb. ss. of the fore-written Apozem; adding Tincture of Amber, and Sal volatile Oleosum, of each dr. ij.

But then these Bolus's, though very proper and good for the Symptoms to which they are particularly directed, yet are they diametrically opposite to the other concomitant Symptoms, such as the bloody Urine, *Petechiæ*, &c. I cannot possibly concur with the common Sentiments and Practice of our Physicians, who prescribe the strongest Cordials, and hottest Alexi-

Alexipharmacs, under these Circumstances. These latter Symptoms should, in all Reason, (I think) require Purgatives of a cooling, condensing Nature: Of which Sort I will give a Specimen only; and leave to the skilful Physician, to alter or mend, use or refuse it, as he thinks convenient:

Take Pulp of Tamarinds, dr. xij. Crystals of Tartar, and *Glauber's* Salt, of each dr. iv. vitriolated Tartar, and crystal Mineral, of each scr. iv. Oil of Cinnamon, gtt. iv. Syrup of the Five opening Roots, q. s. to make an Electuary: Of which take dr. iij. for a Dose, every sixth Hour, so long as Need shall require; drinking after, a Draught of the following Apozem:

Take the Five opening Roots, of each dr. vj. red Roses, dr. iv. boil gently in q. s. of Water to lb. ij. when strain'd; to which add Syrup of Mulberries, oz. iij. Spirit of Vitriol, gtt. lx. or q. s. to bring it to a grateful acid Taste.

I could offer many solid Arguments, in Support of this my Opinion, and in Refutation of the opposite Sentiment; but cannot afford Room for them at present.

I don't doubt but a great Professor in a neighbouring Republic would order Butter-milk to be drank under these last-mentioned Circumstances; and (for ought I see to the contrary) it may be very proper and good: But we have many Physicians amongst us, who (perhaps) would rather let the Patient die, than incur the Imputation of having prescribed or dealt in an old Woman's Medicine, as such Things are usually termed.

Though the Symptoms, lately enumerated, are the most frequent and dangerous that happen in this Disease; yet are they not all. There are, indeed, many others, too tedious to mention; at least to speak particularly upon: And as they may be in Nature and Essence akin to some of those already mentioned; so they may be reduced under the same general Treatment.

I be-

I believe this Method (if pursued with Care, Affiduity, and good Judgment) will, generally speaking, prove successful; that is, as successful as any other, I mean.

The *Æthiops mineral* may appear a new Remedy (perhaps) in this Disease too; but nevertheless, I have very good Authority for recommending it, having several times experienc'd it with Success.

The temperate Regimen ought to be strictly observed and pursued in this Sort of Pock: But however, when the Crisis advances towards its Period or State, it will be not only allowable, but adviseable likewise, to join stronger Cordials and Alexipharmacs to the Remedies above-described; and to augment them gradually, till the Pustles crust, and the Scabs fall off.

If a second Fever happens, a thing which is very common in this Sort of Pock, after the Turn of the Pustles; 'tis plain, in that Case, that Nature with all her auxiliary Forces was not able effectually to protrude and thrust off the morbid Matter the proper Way, at the Superficies of the Body: In consequence of which, some Part of it returns upon the Blood, and stirs a new Fever. Now, it appears to me in this Circumstance, (however repugnant I may seem to the Sentiments and Practice of the World in general) that it would be altogether vain and fruitless to attempt that way any more. Some other way, then, ought to be sought after, by which we may either alter and correct the remaining Matter, so as to render it offenceless in the Blood; or else to discharge it by some other Secretion.

Sundry Methods present themselves to my Reflections upon this Head; of which I shall confine my Expression to such only as seem in my Opinion to merit the Preference: And, first, a gentle Salivation, or rather a *Ptyalismus*, raised by small Doses of Calomel, repeated every six Hours: Or, 2^{dly}, it may be

be mix'd with Correctives and Cathartics; which will elude the Effect of Spitting, perhaps, and may nevertheless be of great Benefit: *Ex. gr.*

Take Calomel finely levigated, dr. j. *Poterius's* Antihectic, diaphoretic Antimony, and Rhubarb, of each dr. ij. Russia Castor, scr. ij. Rob of Elder, oz. ij. Venice-treacle, oz. iij. Syrup of Poppyheads, q. s. to make an Electuary, whose Dose is dr. ij. to be taken every sixth Hour, drinking after every Dose lb. ss. of Decoction, as for Syrup of Marshmallows, warm, and to be continued so long as Need shall require.

The Patient should be kept very warm, during that Process, and managed in all respects with as much Care and Circumspection, as if a Salivation was expected to ensue: Or, 3dly,

Take our Electuary of Quicksilver, dr. iij. for one Dose, to be taken every Night and Morning, so long as there shall be need.

This, indeed, will scarce raise any Spitting; but nevertheless, it may alter and correct the morbid Matter, so as to render it benign and offenceless in the Body; or else may discharge it insensibly by Urine, or some other Secretion: Or, 4thly, Alteratives, mix'd with Cathartics; as,

Take Æthiops mineral, dr. iv. Gum Guaiacum, *Poterius's* Antihectic, and Rhubarb, of each dr. ij. Electuarium Catholicon, oz. j. Syrup of Cichory, with Rhubarb, q. s. to make an Electuary; of which take dr. ij. every sixth Hour, drinking after, a Draught of the fore-written Decoction.

But if the over-cautious and timorous Physician should reject all these Methods, and prefer the Use of Cordials, Alexipharmacs, and Sudorifics: In such Case I counsel the copious Use of Blisters at the same time; by the Help of which, indeed, much may be hoped for: Nor should the Use of Issues be neglected in this Case.

But

But before I dismiss this Subject, I can't omit to remark, that under a certain perillous Circumstance of this Disease, a Method is at this Day essay'd with Success, which preceding Ages (perhaps) never thought of, and much less ventur'd to put in Practice: That is, when (upon the sinking of the Pustles) the morbid Matter determines itself inwardly upon the *Viscera* and Intestines, attended with great Sicknefs, Gripes, Weaknefs, Faintnefs, &c. and a *Diarrhæa* does not succeed, strong, irritating Glysters have been applied to sollicit the morbid Matter; and brisk Cathartics, to precipitate the same by the intestinal Glands (supporting the Patient with strong Cordials at the same time): And by this Practice (as a certain Author expresses it) Numbers have been snatch'd from impending Death.

This specifies a good deal, concerning the Usefulness of Cathartics and Glysters in this Disease; and particularly as to the Occasions and Times of using them; *viz.* that they may (under certain Circumstances) be applied, not only with Safety, but Success likewise. And surely, under the mentioned Circumstances, when Nature is evidently too weak and feeble any longer to support and carry on her favourite Work, she ought in that Case (if not possible to be assisted, at least) to be relieved by the seasonable Application of such Medicines as may eliminate and discharge the incumbent Matter some way or other.

Notwithstanding I have recommended the temperate Regimen in general Terms, and strenuously urged the Use of it, in both Sorts of the Small-pox; yet it is to be supposed, that particular Circumstances may happen in each, which render a Change, either to the Cold or the Hot, both necessary and adviseable. Of these Things the Pulse will always be the best and surest *Criterion*, and is that which the Physician should always appeal to, and rely on.

If

If the chimerical Fancy (made Mention of in the Beginning) of curing this Disease in its febrile State, so as to prevent or subvert the Eruption, had any Probability, or even Possibility on its Side, it would then be highly worth our Pains, to take it under our serious Consideration: And if it is any ways to be done, I believe one of the four Methods just now proposed for the Cure of the Second Fever, has a fair Chance to effect it. However, I do not recommend them; neither would I ever put them in Practice with that View, except I had ocular Demonstration of their Success, or at least some other very good and sufficient Vouchers for it; which I scarce expect to meet with.

N. B. It would be worth inquiring, whether any Person who had been well salivated two or three times for other accidental Diseases, (having never had the Small-pox before) had that Disease afterwards: And if no Example of this Sort can be produced, then we may venture to conclude, that the original *Stamina*, Seeds or Principles of the Small-pox were extirpated, in common with other ill Humours, (whether latent or patent) and consequently the Person freed from that Disease, by Accident.

But the calamitous Circumstances that generally attend this Disease, (not to mention its frequent Fatality) as well as the Dread and irksome Apprehensions that precede it; in a great many, at least, who live for Years together in continual Fear of it: Those, I say, are in great measure to be supplanted by a Method, (of late introduced amongst us) called *Inoculation*.

This Practice I never had any Experience of; nor indeed have I ever once seen it, and therefore, with regard to it, am oblig'd to build my Opinion upon the Reports and Tradition of others.

I have read several Pieces, *pro & con.* concerning it; and have heard many Debates to the like Effect:

And when I sum up the Arguments on both Sides, and bring their respective Products in Balance together, I must confess I find myself obliged to give my Vote in favour of Inoculation.

Considering Things *in prima facie*, I am sure the Preference it claims is too plain to admit of the least Contest or Dispute: For, *1st*, 'Tis universally maintained and allowed, that not above one Person in a considerable Number (we will suppose a Dozen) lives to an advanced Age, without getting this Distemper in the natural way, except it was eluded by a preceding Inoculation. *2dly*, Upon a very accurate, impartial, and faithful Estimate, it appears (at an Average) that at least one sixth Part die, who have the Disease the natural way. These Premises being granted, it follows, that one sixth and half Part of the Community (who are not otherwise carried off, before they arrive at an advanced Age) die of this Disease.

Now, let us look into the State of the Case, as it governs, and generally happens under the Practice of Inoculation.

It is positively asserted and maintained by the Advocates for Inoculation, (and I must take it for Truth, as I never heard it fairly refuted by the opposite Party) that not above one in 50, or at most one in 48, die, of those who have the Small-pox by Inoculation. — Hence (were no other Objections to be exhibited) it appears plain, that Inoculation is the more safe and easy, and consequently the most eligible Way of Proceeding.

But besides this visible and incontestable Advantage; should all the World espouse and practise this Method, every one (doubtless) would have their respective Children inoculated, within the Compass of a Year or two old, before they could reasonably be supposed to have contracted any ill Habits: What would be the Consequence of this? Why, all those
who

who had undergone, and happily pass'd thro', the Operation, would for the future be free from those Terrors, Fears, and Apprehensions, that constantly haunt many Persons who have not yet had the Disease.

But the two grand and most important Objections against Inoculation, remain yet to be recogniz'd ; *viz.* first, the Theologists, (on the one hand) some of them at least, say, that the Practice of Inoculation is a Tempting and Provoking of God Almighty : That it is thwarting his Designs, usurping his divine Prerogative, and taking his proper Work (that of inflicting Diseases) out of his Hand : But this, however, is, what I believe, the strict and thorough-paced Predestinarian will scarcely subscribe to.

The Second Objection against it (urged by some Philosophers, and perhaps Physicians too) is this ; *viz.* That possibly, and perhaps, *and so forth*, the latent, invisible Seeds of some ill Habit (such as the scorbutic, pocky, scrophulous, or the like) might exist in the Blood of the Person from whom the inoculating Matter was taken ; and if so, that the supposed latent, invisible Seeds might probably be transplanted, together with the variolous *Fomes*, into the Blood of the Subject to be inoculated : That thereafter the supposed Seeds might multiply, fructify and increase ; and, finally, manifest the same corrupt, vitious Habit, in the Person inoculated, that was innate in the Person from whom the same was taken.

As to the first of these Objections, (though, in my humble Opinion, 'tis a little deficient, in point of Weight) I shall not attempt either to remove, or refute it. But for the second, as that does smell a little physical indeed, so on that Account, (though scarce on any other) it demands our Examination.

That the Seeds or Principles of a Scurvy, Pox, King's Evil, or any other chronical Disease almost, may be innate and latent in the Constitution of the Person from whom the Matter for Inoculation is taken, so far is very possible: And furthermore, that some small Part or Portion of these same latent Seeds may be taken (together with the Matter for Inoculation) and transplanted into the Blood of the Person to be inoculated; this is likewise certain. But what will be the Consequence of all this? Why, very little, truly: For we are to consider, first, that the Quantity of these foreign Seeds, or Principles, (supposed to be thus transplanted) is so very small, as to be of no comparative Weight or Force; and 'tis much more reasonable to suppose, that they will be vanquish'd and (as it were) annihilated by the Force of the Constitution into which they are received, than that they should ever acquire or recover Force enough to wage War upon the Constitution, and to reduce it under their Tyranny and Subjection. But further, it is very probable, and indeed almost certain, that the whole Bulk of the supposed latent Seeds are so wrought upon, during the variolous State, or by the variolous Fever, (either dividing and comminuting their Substances, or else digesting and concocting them) as greatly to enervate and weaken their Force and Texture, if not intirely destroy their Essence.

But the Probability and *Vraisemblance* of this Conjecture will still obtain further Force and Sanction, if we only reflect, that many young People, who had been valetudinary, weak and sickly, before the Small-Pox, (in the natural way, I mean) have become healthy, robust and strong, upon coming out of that Distemper. And this, I think, plainly intimates, that the supposed valetudinary Persons (before they had the Small-Pox) were incumber'd and distress'd,
and

and kept weak and sickly, by means of some latent (though invisible) ill Habit; but that, upon the Access of the Small-Pox, the supposed latent Seeds were intirely destroyed and exterminated, in common with the variolous *Fomes*.

But be it further observed, that the supposed latent ill Humours, upon which this grand Objection is founded, are always expos'd to two different Operations or Trials; and therefore, if the first should not perfectly meliorate and correct them, or kill and destroy their noxious Qualities, their being immediately subjected to the like Torture a second time, will, in moral Certainty, effectuate it: For, first, the variolous Matter, design'd for Inoculation, is not taken out of the Pustles till they are at a State of Maturity, or nearly so; and then, in the Habit of the Person to whom they are transplanted, they are destin'd to go through the whole Process.

Upon the whole: If I had ever so many Children, or other Relations, whose Lives and Happiness I was very anxious and solicitous to preserve, I should incline to subject them all, and every one of them, to this Operation; for it is only essaying a very slight (though certain) Inconveniency, and an inconsiderable Danger, in order to elude a much greater (though uncertain one) both of one and the other.



C H A P. IX.

Of the MEASLES.

THIS Disease, in some respects, greatly resembles the Small-Pox. This is an eruptive Fever, (as well as that) which every body is liable to have once; infomuch that there are but very few Persons, who arrive at the ordinary Period of Life, but have had it. Moreover, it is in this Disease, as in the true, genuine Small-Pox, that when a Person has once pass'd through it, he is not liable to have it a second time. Hence it appears, that (in this Disease, as well as in the Small-Pox) its proper Seeds, or Principles, were innate in the Constitution: That when they are arrived at a State of Maturity, they either spontaneously, and of themselves, excite a Fever, and cause all the Symptoms peculiar to the Disease, or otherwise are actuated and put in Motion by the Access or Intromission of morbillous *Effluvia*, communicated and conveyed from some one sick of the same Disease.

However, it appears here, (as in the Small-Pox) that these innate Principles, or necessary *Stamina*, are intirely vanquish'd and subdued by the morbillous Fever, or else expell'd and discharg'd by the *Crisis*; so that there remains no Possibility of that Distemper's happening again in the same Constitution.

The morbidic Matter that constitutes and subtends this Disease, is abundantly more mild and benign, than that productive of the Small-Pox (the confluent Sort especially); and consequently, this Disease is seldom fatal in itself, (if the Cure is conducted with a tolerable Share of Judgment and Prudence) though 'tis very often so in its Consequences or Effects.

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We may reasonably infer, from the ordinary Symptoms of this Disease, (such as the heavy Cough, Difficulty of Breathing, Heaviness of the Head, great Propensity to Sleep, Bloatedness of the whole Visage, Inflammation of the Eyes, Swelling of the Eye-lids, &c.) that the morbid Matter here is equal in Quantity to that of the Small-Pox, though not by far so acrimonious and virulent.

This Disease generally invades by alternate and successive Shiverings, or Chills and Heat. These, perhaps, may occupy the Space of a Day, and then give place to a constant, settled Fever. And again, this Fever (which is commonly pretty violent) generally abates as the Eruption comes on, which usually appears on the third or fourth Day.

It would be unnecessary to give a more minute and particular Recital of every individual Symptom, that may present through all the Stages of the Disease; because, as the Appearances are generally the same (only differing in Degree) in all Subjects, so they are very well known to every Practitioner. I therefore hasten to propound the Intentions of Cure, and to direct the most proper and effectual Methods for executing them.

The curative Intentions then consist, *1st*, In depleting the Vessels by copious Bleeding, before the Eruption appears, if possible. *2dly*, In promoting the Separation of the morbid Matter from the Blood (by dissolving its Tenacity, and destroying its Cohesion). *3dly*, In facilitating and hastening the Eruption. And *lastly*, In perfecting a laudable *Crisis*. To answer all which Intentions, I advise as follows; *viz.*

First, let Blood, to oz. xij. xv. or xx. according to the Age, Strength and Temperament of the Patient.

After, exhibit the following *Emetic*; especially if the *Nausea's* and Vomitings require it:

Take Ipecacuanna, scr. j. Oxymel of Squills, dr. vj. Mint-water, dr. xij. solutive Syrup of Roses, dr. iij. Make a Potion; to be taken three Hours after Bleeding.

Take Lac Sulphur. scr. j. *Poterius's* Antihectic, gr. xij. Roots of Elecampane, and Florentine Orris powder'd, of each gr. vj. Saffron and Castor, of each gr. iv. the Egg Electuary, and Mithridate, of each gr. xv. Confection of Alkermes, q. s. to make a Bolus: To be taken every fourth Hour, drinking after, a Glass of the following Apozem, made warm:

Take Root of common Grafs, and Spanish Scorzonera, of each oz. ij. Elecampane-root, and Florentine Orris, of each dr. iv. Flowers of white Horehound, and Colts-foot, of each m. j. Coriander-seeds, dr. iij. Let them be boil'd in q. s. of Water to lb. ij. when strain'd; to which add simple Oxymel, and Syrup of Elder, of each oz. ij. Spirit of Nitre dulcified, dr. ij. Mix.

The Patient may drink a Draught of the same Apozem frequently, betwixt whiles; or of some other warm, diluting, pectoral Liquor, such (for Example) as Sack-whey, with Maiden-hair, and Marigold-flowers boil'd in it.

If, during the Course of the Disease, a *Diarrhæa* should happen, on the one hand, or the Patient be over-costive, on the other; the former may be restrained by the following *Paregoric*, or the latter be relieved by an emollient Glyster:

Take Barley Cinnamon-water, oz. iij. Syrup of Poppy-heads, oz. j. Diafcordium without Honey, dr. j. liquid Laudanum, gtt. viij. or x. Make a Draught; to be taken at Night going to Rest, and to be repeated as often as Need shall require.

The Diet, in this Case, (as well as in both Sorts of the Small-Pox) should consist of Broths and Gruels made of the *Legumes*, and Things of the farinaceous Kind. Roasted Pippins, in great Plenty, are likewise

wife very proper and good, both in this, and the other Cases above-mention'd.

The properest Cathartic, to be given after the Turn of the Disease, is the following :

Take Rhubarb, dr. ss. Species of Hiera Picra, scr. j. Diagrydium, and Salt of Tartar, of each gr. v. Oil of Cloves, gtt. v. Make a Bolus, with q. s. of Syrup of Buckthorn: To be taken early in the Morning, with proper Regimen; and to be repeated every third Day, for three times.

It appears from what has been said above, that more Skill and Care are required to prevent the fatal, and other ill Consequences of this Disease, than to cure the primary Disease. And, I flatter myself, I have laid down such a Method, as is well-calculated, not only to cure the Disease itself, but likewise to prevent its ordinary ill Consequences. And to this End, therefore, it would be proper to continue it for some Days after the Turn of the Disease, till Purging becomes necessary; and even for some Days betwixt those of Purging.

I think Blisters are not much in Practice with us in this Disease: But surely they may contribute great Help, and are extremely necessary, where the Number and Degree of the Symptoms, and the apparent great Quantity of morbid Matter, give Cause to fear, that the Recrement, or Dregs of it, should fall upon the Lungs, or otherwise offend the Constitution, after the Turn of the Disease. But when the morbid Matter is not duly discharg'd by the Crisis of this Disease, its common and most usual Tendency is to fall upon the Lungs; where it frequently forms a *Peripneumonia*, and sometimes lays the Foundation of a Consumption.

But in order to obviate and prevent these unhappy Consequences, where there is Reason to fear them after
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the Crisis is over, and the Spots are intirely gone off, I advise as follows :

Take Quicksilver depurated, dr. vj. true Balm of Gilead, dr. ij. Let them be rubb'd in a Mortar till the Mercury is perfectly extinguish'd ; to which add Gum Storax, and choice Myrrh, of each dr. j ss. Rhubarb, dr. ij. and beat well into a Mass for ninety Pills ; of which take five thrice a Day, drinking after, oz. iv. of the following Apozem :

Take Roots of Sarsaparilla, China, and Eryngo, of each oz. j. of Elecampane, and Florentine Orris, of each dr. iv. Leaves of white Horehound, m. ij. Roots of Mecoachan and Hermo-dactyls, of each dr. j. white Sugar-candy, oz. iv. Let them be boil'd in q. f. of Water to lb. ij. when strain'd ; to which add of the magisterial Water of Earth-worms, oz. iv. Mix, and give it.

The Views and Designs that Physicians generally form and pursue, under these perillous Circumstances, are to discharge or draw off the incumbent Matter by way of Expectoration, or a copious Spitting : And, in that View, they generally content themselves with prescribing soft, oily *Linctus's*, and pectoral, mucilaginous Drinks. But as I have both seen and experienced the Impotency and Insufficiency of such Methods, in various Instances, so I intirely leave them out : And I am pretty confident, the Method I here prefer, and recommend in their Place, will abundantly answer and justify the Strefs I lay upon it. And therefore I advise, that the Medicines be repeated when finish'd, and their Use continued till the Patient is perfectly well.

I dissuade from the Use of an over-hot *Regimen*, as well in this Disease, as in the Small-Pox, and for the same Reasons, partly ; but especially forbid the Use of great Fires, and large Heaps of Cloaths upon the Bed.

But before I dismiss this Topic, as 'tis a Matter of great Importance, and a Circumstance that frequently

quently happens after the *Measles* are gone off, so I will take it once more under my Consideration, in order to examine and discuss it more at large.

The morbid Matter then thus resting in the Blood, after the morbillous Fever is over, the *Crisis* at an End, and all Signs of the Eruption intirely gone off, is by that time, doubtless, pretty nearly concocted, and deprived of its Sting; that is, 'tis no longer capable to irritate and stir up a febrile Ferment or Effervescence in the Blood, as it often happens after the Small-Pox. Hence therefore it necessarily follows, or may be reasonably concluded at least, that this Recrement, or remaining Matter, was either too gross and viscid to be secreted, or thrown off, by the excretory Pores of the Skin, or by the Kidnies; or else, that Nature (by which we mean the whole Force, or Sum total, of all the animal Powers and Faculties) was unable to protrude and thrust it off by the way of Spitting, or otherwise: And, consequently, it rests in, or returns upon the Blood, and remains fluctuating in it.

But here it may be ask'd, perhaps, why the morbid Matter, thus resting in the Blood after the *Measles*, does not subside to some less noble Part, and terminate in an Abscess, as it frequently happens after some other Fevers, that are not of the eruptive Kind? And to this I answer, *First*, That the Lungs are principally and eminently affected through the whole Course of the *Measles*; as is evident from the constant and severe Cough, and great Difficulty of Breathing, which the Sick of that Disease universally labour under. *Secondly*, That as the morbid Matter is particularly and forcibly impress'd on the Lungs, through the whole Course of the Disease, from its first Commencement, to its utter Extinction; so the Blood-vessels, and Vesicles of the Lungs, will thereby be over-stretch'd, and immoderately distended: And hence

hence it necessarily follows, that as the said Blood-vessels and Vesicles are become more lax and weak than any others of the Body, so they will (of course) be the Seat and Scene of any future Disorder, that shall be subsequent to, and dependent on, the *Measles*. And thus far concerning the true Causes, Nature, and Essence, of these pernicious Legacies.

Now this being the true State of the Case, (and that it is so, is, I think, plain, next to Demonstration) the Methods commonly practis'd, of drawing the Matter off by Expectoration, must be very precarious, if not pernicious. For supposing their Designs of bringing on a copious Expectoration should succeed to their Wishes, (which, by the way, does not always happen) at the same time that they remove the incumbent Load or Humours, they infallibly solicit and invite more thither, as they serve to relax and weaken (yet more) those same Parts which wanted to be strengthened and restored. And hence it may reasonably be concluded, that such Methods will tend to aggravate the Cause of the Disease or Disorders, at the same time that they relieve the Effects. But suppose the contrary of all this, *viz.* that their Views of bringing on a copious Spitting should not be answer'd by the Use of such Methods; then the Medicines (intended to cure) will infallibly increase the Disease, as they will tend to relax and weaken the Parts, and give Scope and Room to a larger Influx of morbid Matter. But as I have pointed out and explain'd the Errors and Defects of one Scheme, it behoves me to constitute another, and a better, (if I can) in the room of it.

The proper Intentions of Cure, under the supposed Circumstances, are, as I apprehend, 1st, To attenuate and resolve, or to break, divide, and comminute, the morbid Matter. 2^{dly}, To warm and comfort, strengthen and restore, the weaken'd Vessels

sels and Vesicles of the Lungs. And, *lastly*, To expel and discharge the morbid Matter, so prepared, by the Secretion that Nature seems to favour most; whether it be by Spitting, Sweat, Urine, or Stool.

The Method already proposed above, is well-calculated to answer all these Intentions. However, should the Physician be so over-scrupulous and timorous, as to reject the Use of Mercurials, I would always be tender and indulgent to Consciences truly scrupulous or weak; and as I am not confin'd and limited to that alone, shall recommend some other Methods to his Choice. For Example:

Take native Cinnabar, and Gum Guaiacum, of each dr. ij. best Castor and Camphor, of each scr. ij. Gum Ammoniacum strain'd, dr. j ss. Extract of Gentian, q. s. to beat into a Mass for eighty Pills; five of which let be taken every sixth Hour, drinking after, oz. vj. of the following Decoction, warm:

Take Roots of Sarsaparilla and China, of each oz. j ss. of Eryngo and Elecampane candied, of each oz. ij. Florentine Orris-root, candied Ginger, and Coriander-seeds, of each dr. iv. Let them be boil'd gently in q. s. of weak Lime-water, to lb. ij. when strain'd.

Or,

Take Rust of Iron in subtile Powder, dr. vj. Rhubarb, and Species of Diambre, of each dr. iij. candied Nutmeg, and Elecampane-root candied, of each oz. j ss. Syrup of Elecampane, q. s. to make an Electuary, whose Dose is dr. ij. To be taken thrice a Day, drinking after, oz. iv. of the following Apozem:

Take the Five opening Roots, of each oz. j. Coriander-seed, dr. v. Roots of Mecoachan and Hermodactyls, of each dr. j ss. Let them be boil'd in Hyssop and Fenel-water, of each lb. ij. to the Consumption of a third Part; adding, towards the End of its boiling, fresh Stone-horse-dung, lb. ss. Let it stand in a Vessel well-closed till grown cold, then strain and press gently; to which add Viper-wine, oz. vj. Chalybeat-wine, oz. ij. Mix, and give it.

Or,

Take Gum Guaiacum, dr. iij. antimonial Æthiops, dr. ij. Gum Ammoniacum, and Extract of black Hellebore, of each scr. iv.
Balm

Balm of Gilead, q. s. to make sixty Pills; five of which let be taken thrice a Day, drinking after, oz. iv. of the fore-written Apozem.

But whichsoever of these Methods is preferred, and put in Practice, it will be proper to purge the Patient every fourth or fifth Day with the following Pills:

Take Rhubarb, and Species of Hiera Picra, of each scr. j. Calomel, gr. x. Diagrydium, and Salt of Tartar, of each gr. v. Oil of Cloves, gtt. v. Mix, and with q. s. of Elixir Proprietatis make five Pills.

By the regular and due Use of any one of these Methods, (though I recommend the first, preferable to the others, viz. that of *Crude Mercury*, &c.) this vexatious and dangerous Legacy of the *Measles* will, in high Probability, be either prevented or cured.

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